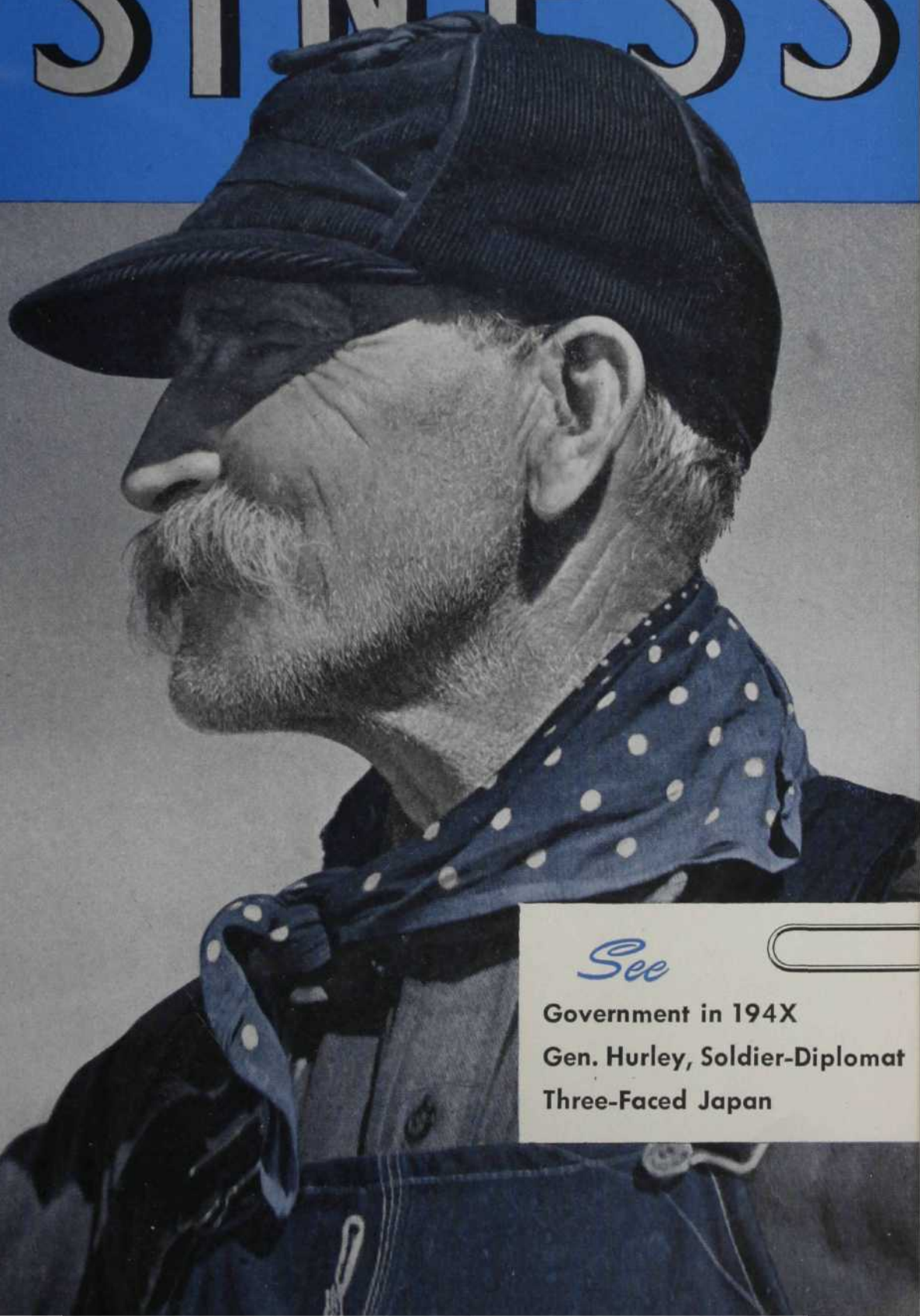


MAY

NATION'S

1944

BUSINESS



See

Government in 194X

Gen. Hurley, Soldier-Diplomat

Three-Faced Japan



ON THEIR WAY



Shades are drawn down. Lights dim low. The landscape is blotted out... there's just the hum of the speeding train.

These boys know what it means—the troop train is approaching the troop ships.

Some draw a deep breath. A soldier fumbles for a letter. Another wonders if he can make a last telephone call. Another draws out a crumpled photograph.

No, travelers don't see this—but the trainmen of the Pennsylvania Railroad do, daily. And more so than ever now. As the swelling tide of American youth—fine and fit—streams overseas...

Of course, it takes a lot of equipment for these troop movements—but with what remains we are doing our best to serve all essential travelers... efficiently, courteously.

BUY UNITED STATES WAR BONDS AND STAMPS



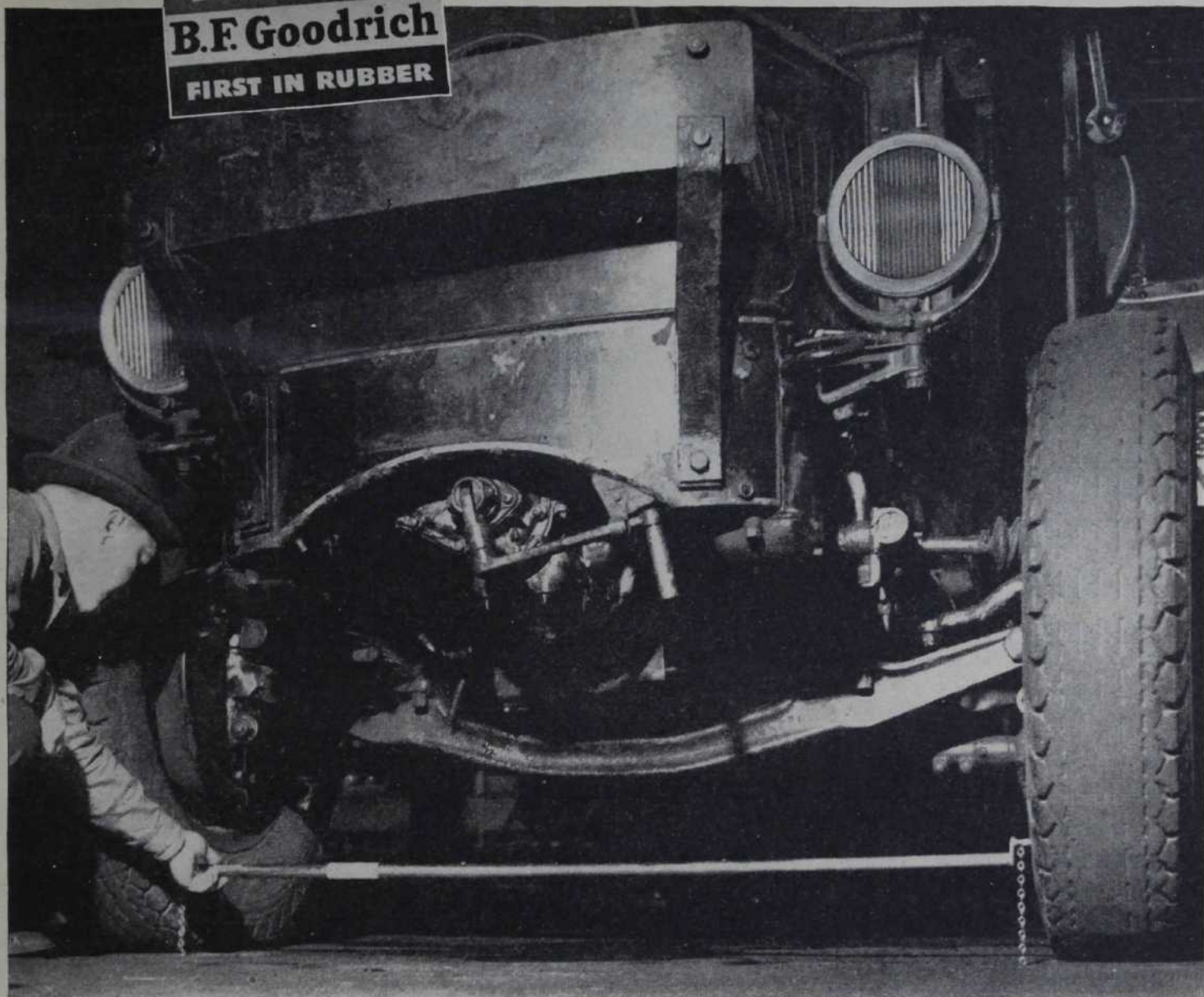
Pennsylvania Railroad

Serving the Nation



★ 44,448 in the Armed Forces ★ 123 have given their lives for their country

In war or peace
B.F. Goodrich
FIRST IN RUBBER



The truck with the pigeon toes

A typical example of B. F. Goodrich development in rubber

FOR years many truck tires have worn out long before their time.

Take the case of the "pigeon-toed" truck. Most front wheels should toe-in slightly when the truck is standing still so that they will be parallel when running. If they toe-in too much, excessive tire wear results. A wheel that is only one-half inch out of alignment is dragged 87 feet every mile it rolls. Excessive wear results.


Truck owners have done their best to watch these seeming details which may shorten tire life. But still too many tires wore out before their time.

Then B. F. Goodrich drew on the

experience of many years in handling completely the tire maintenance of large bus fleets. They established the B. F. Goodrich Tire Conservation Service for fleet operators. Under this plan factory-trained tire men take over the complete supervision of tire maintenance. These men know how to spot the pigeon-toed trucks such as that shown in the picture. They know what to look for, how to stop tire troubles before they start.

Today hundreds of fleets, including many of the country's largest, use this conservation plan. Savings of rubber, mileage, and money have been huge. Typical of the comments of operators

are "We believe we will show a 25% saving" . . . "This service saves far more than it costs" . . . "The number of failures has been reduced 60%."

Only a few trained men are available to take over a limited number of additional fleets in certain areas. If you would like to know how this unusual tire conservation plan can increase your truck fleet tire mileage write the Tire Conservation Dept., The B. F. Goodrich Co., Akron, Ohio. For good truck tires see the local B. F. Goodrich dealer or Silvertown store. 

B.F. Goodrich
Truck & Bus Tires

Face the Future
with a firm assurance
that your house is in order



*You've Got to Spend Money
to Make Money*

GEORGE S. MAY COMPANY

Business Engineering

NEW YORK 17

CHICAGO 45

ATLANTA 3

WASHINGTON 5, D. C.

CANADA: Toronto • Montreal

SAN FRANCISCO 4

OFFICES IN PRINCIPAL CITIES



PUBLISHED BY

CHAMBER OF COMMERCE OF THE UNITED STATES

VOL. 32

MAY, 1944

NO. 5

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POST-PEACE

DUST PROBLEMS OF TOMORROW



**can be solved
TODAY!**

There are many things which cannot be settled definitely in advance of V-day—but your dust control problem is *not* one of them!

Here at AAF an experienced dust engineering staff is ready *right now* to plan with you on your postwar needs for *scientific* air filtration and dust control.

Planning together *today* may easily prevent delivery disappointment *tomorrow*, when the rush for postwar equipment starts.

May we send you a free copy of illustrated booklet "AAF in Industry", which describes AAF equipment and its many applications?

AMERICAN AIR FILTER CO., INC.

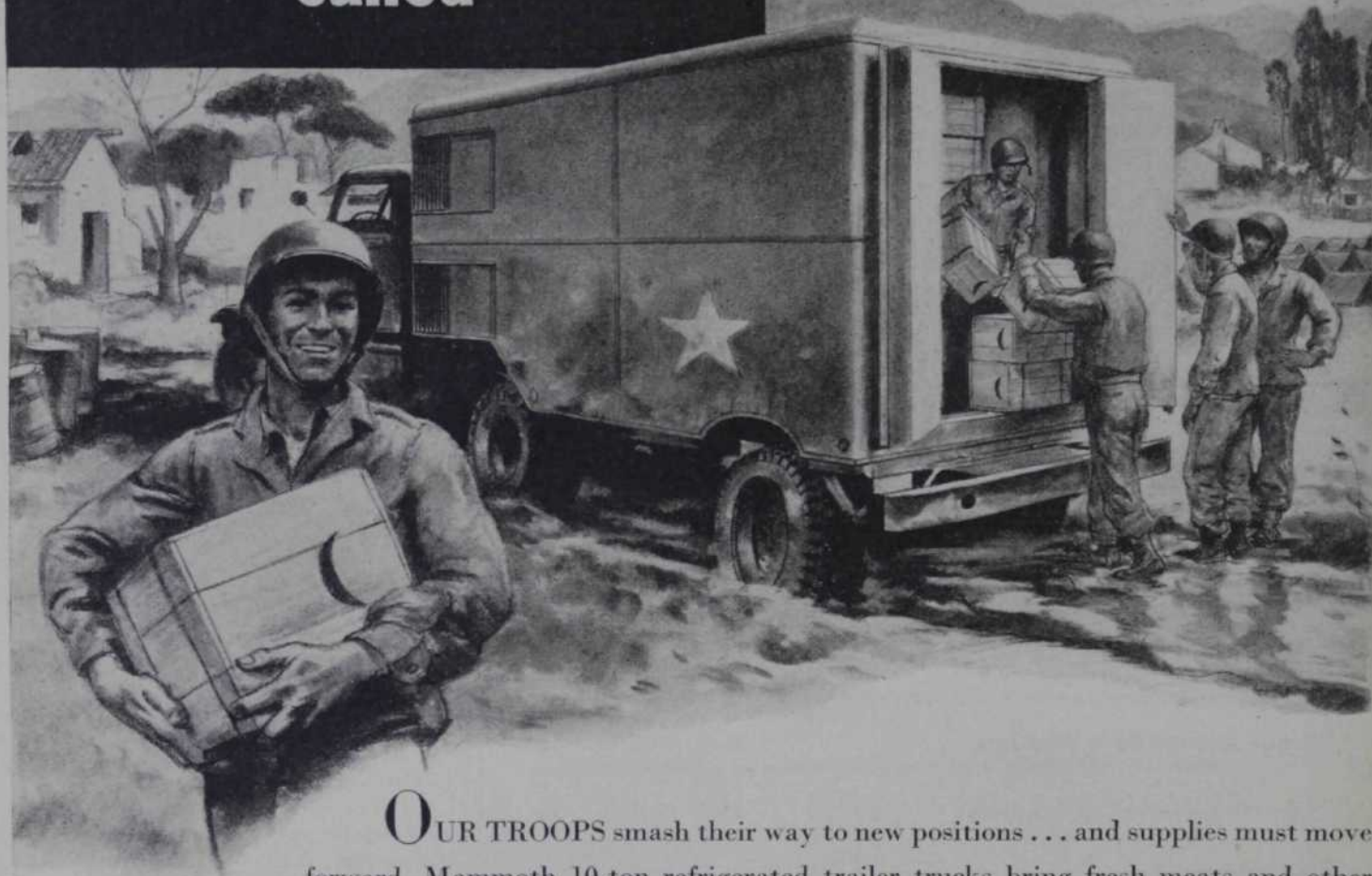
109 Central Avenue, Louisville 8, Kentucky

In Canada: Darling Bros., Ltd., Montreal, P.Q.



ENGINEERED DUST CONTROL

The REFRIGERATOR that comes when called



OUR TROOPS smash their way to new positions . . . and supplies must move forward. Mammoth 10-ton refrigerated trailer trucks bring fresh meats and other perishable foods to weary, hungry fighters! Such rolling refrigerators are made possible by a compact gasoline-driven refrigerating unit developed in the laboratories of the York Corporation for the Army Quartermaster Corps. They can maintain a constant temperature as low as 10°F. . . even in tropical climates where the mercury may soar to 120° and roof temperature to 150°. Each unit operates automatically and is entirely self-contained. The demands on refrigeration and air conditioning brought about by the exigencies of war will have a profound effect on peacetime food distribution. Today York and leading trucking concerns foresee fleets of refrigerated trucks swiftly rolling up and down the land . . . operating at America's beck and call . . . carrying the good, fresh food to help a strong nation grow stronger.



LITTLE BROTHER . . . Where terrain is mountainous and the going too rough, portable refrigerating units are transported on trailers. Since these York engineered units are also automatic and completely self-contained, they can be dropped off to act as a commissary for isolated detachments . . . Wherever soldiers can be followed, fresh food also goes.



YORK REFRIGERATION AND AIR CONDITIONING

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885



PEERLESS

The name

that

speaks

Volumes

on the

Water-front

10 TO
220,000
G.P.M.

Peerless Pumps

PEERLESS PUMP DIVISION

Food Machinery Corporation

301 W. Ave. 26, Los Angeles 31, California
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OTHER FACTORIES: San Jose 5, and Fresno 16, Calif.

Through the Editors' Specs

Objection presented . . .

HERE we have been working right along under the impression that we were putting out a magazine for the enlightenment, diversion, encouragement and edification of the professional business man, only to find—according to the dictionaries—there ain't no such animal.

The compilers of word-books evidently have conspired and agreed that *their* definitions of the word PROFESSION shall exclude anyone who engages in trade. Narrowed down, the word means:

"The occupation, if not commercial, mechanical, agricultural, or the like, to which one devotes oneself; a calling; as, the *profession* of arms, of teaching; the three professions or learned professions of theology, law, and medicine."

So Edison, Wanamaker, Chrysler, Phil Wrigley, Condé Nast, Bill Jeffers and Barney Baruch are not worthy of professional standing, but Hitler's generals are. What nonsense!

Modern Business has a literature of its own, standards of service and quality, a system of ethics and its own institutions. No profession has more.

True, some business men are quacks but the same can be said about lawyers, doctors, ministers and teachers.

We still think most of our readers are professional business men; leaders in their communities, skilled in their specialties, a comfort to the parents who bore them, and, with mighty few exceptions, doing a good job.

Another postwar change

MILLIONS OF Americans will remain in uniform after the war. Not soldiers and sailors but workers in American factories will be the uniformed army of the fight for rehabilitation, a survey by the Linen Supply Association of America has revealed.

Sixty-five per cent of the 7,750,000 war production workers are now wearing work uniforms. More than 90 per cent of the plants now using uniforms said they planned to continue using them after the war.

A contributor, William Feather, suggested in this magazine ten years ago

that uniforms would improve plant morale. We fear that grim-visaged War has more influence upon our readers than sound editorial advice.

Fine art

IT HAS become a national custom to embellish Washington parks with statues of our heroes. We have Bryan with an admonishing forefinger pointed at the star Arcturus. We have Farragut, one foot on a recumbent sheave and a telescope in position to drag a bunt down the third base line. We even have George Washington nudely austere in a half-mast Roman toga, although the classic motif of this so affronted the popular fancy and the First President's dignity that it has been shunted to a dark and secret corner.

However, the heroes whom we have attempted to endow with the greatest grandeur all pose in bronze nonchalance on horses variously rampant. It occurred to us that this mechanical war entails a baffling postbellum problem for American sculptors. Do we pose this war's heroes on horses they never bestrode or do we pose them in rampant jeeps? Or what?

We took this problem around to Heinz Warneke, well-known sculptor of East Haddam, Conn., New York City, and Washington. He expects to see no flier heroes in togas or equestrian tank drivers. What he does fear is a mass production of memorials with every town buying "our Model 3-D Statue" to set in front of the court house. He hopes that any community or organization desiring to put up a memorial will work from art clubs, societies or committees through formal Art Commissions.

He suggests also that, perhaps the finest memorials might be a park or recreation area with only a dignified plaque naming the hero whose deeds inspired it.

Crime and punishment . . .

A JUDGE in sentencing a criminal, recently said: "I'm giving you the maximum punishment—I'm letting you go free to worry about taxes, rationing,



WHY YOU'LL FIND HIM DOWN BY THE RAILROAD TRACKS

**Many Erie Shippers Have
Received This Letter . . .**



ERIE RAILROAD

To Erie Shippers:

Our Commercial Agent who calls on you, has now been assigned to special work; therefore, for a time, he may not be able to call on you as regularly or as frequently as in the past.

For some time many of our Traffic Service Representatives have been given direct Wartime assignments, as follows:

In **SERVICE BUREAUS**, located at principal terminals or key points, for the purpose of assisting in the movement of freight and to furnish quick, dependable tracing records.

At principal terminals and yards to help the Transportation Department in securing the best disposition of empty equipment and the prompt filling of shippers' car orders, and to insure that the right type of cars will be available to meet the loading requirements of our customers.

As train escorts to facilitate the movement of troops in cooperation with military personnel.

This program is extremely important in the handling of your traffic. It will be continued or extended where necessary, and during our Commercial Agent's absence, our organization continues to be at your service. In the meantime, you will be contacted as regularly as possible by one of our representatives.

Buy War Bonds and Stamps



Erie Railroad



shortages and everything else just like the rest of us!"

But, Your Honor, is "cruel and unusual punishment constitutional"?

Customer relations

UP IN Rochester, New York, a department store has found an effective way to soften the wrath of customers over merchandise shortages and slow service provided by inexperienced clerks.

A huge wall map of the various theaters of war was erected, with clusters of pins indicating where former store employees are slugging it out with the Germans and the Japs. Store executives have found that most customer-irritation melts rapidly after a glance at the map.

Gentle-kick-against change item

AN OLD-TIME Connecticuter drifted in yesterday but admitted he had nothing serious to kick about. He was a little sad, he said, about a recent change in his home town. The Waterbury Button Company had been renamed the Waterbury Companies, Inc.

"Makes me think of when the Nice Nellies changed the name of the country school where I went as a kid from Quail Trap to Oakwood. Maybe Oakwood is prettier, but Quail Trap had some character and flavor to it. I liked it.

"And I liked Waterbury Button Company, too. It had flavor. Can't help but feel it would do just as good a job on Radar or airplane parts as the Waterbury Companies, Inc. But so runs the world away."

Prelude to gunfire

A MONTH or so ago we introduced our readers to Maury Maverick, the unorthodox Texan who now heads the Smaller War Plants Corporation. We feel that we should bring that story up to date by adding that Mr. Maverick is now in historic revolt against Washington tradition. In a recent encyclical he promised the full fury of his wrath to anyone in his organization who uses the kind of language which Washington offices habitually bandy about and ends with the injunction: "Anyone using the words *activation* or *implementation* will be shot."

Though we do not doubt that Mr. Maverick is saying precisely what he means, we shall not be alarmed unless other government agencies adopt similar programs. If they do our whole city will be either dumb or dead. For who in Washington can *point up* programs that stem from local, state or national levels without making himself a candidate for target practice?

And cartridges are rationed, too.

Nor long remember

OUT OF every 100 persons asked to name the U. S. Senators from their State, one person mentions two wrong names, three mention one wrong name and don't know the other, and 43 won't

attempt to name either Senator. Only 31 can mention both names correctly and an additional 22 can name one. Such is the interest of the citizenry in their duly elected representatives to the upper house of Congress, according to a nation-wide survey conducted by the National Opinion Research Center at the University of Denver.

You can say that again

"THIS government has cost me so much that I'm going to insist on getting my money's worth. If you don't do the same, you'll deserve what you get; and there isn't any question that you'll get it!"

—*Man Talking to Himself*
an advertisement for Pitney-Bowes Postage Meter Company

I AM disgusted with the calamity howlers who say this country is going to hell! It is merely going *through* hell!

—*Homer McKee*

... the country has the power to force new procedures on its servants.

—*Anne O'Hare McCormick*

"IT IS more important to give an individual a public hearing if he requests it than to consider the convenience of the Government."

—*Ralph Masinter*
O. P. A. Hearing Commissioner

School for capital and labor

ESTABLISHMENT of a state-supported and controlled School of Industrial and Labor Relations at Cornell University has been agreed upon by members of the Legislative Committee on Industrial and Labor Conditions of the New York State Assembly.

Governor Dewey, President Day of Cornell and educational, labor and industrial representatives approved the idea some time ago.

Committee Chairman, Irving M. Ives, in announcing the move, said:

"Unlike any other education institution heretofore existing. . . This school will be open to representatives of both labor and management or to anyone else. . . All will attend the same classes under the same instructors, all will be faced with common problems and mutual experiences. . . This school should help greatly in developing better labor leadership and more responsible labor unions. It should help no less in improving management personnel who deal with employees."

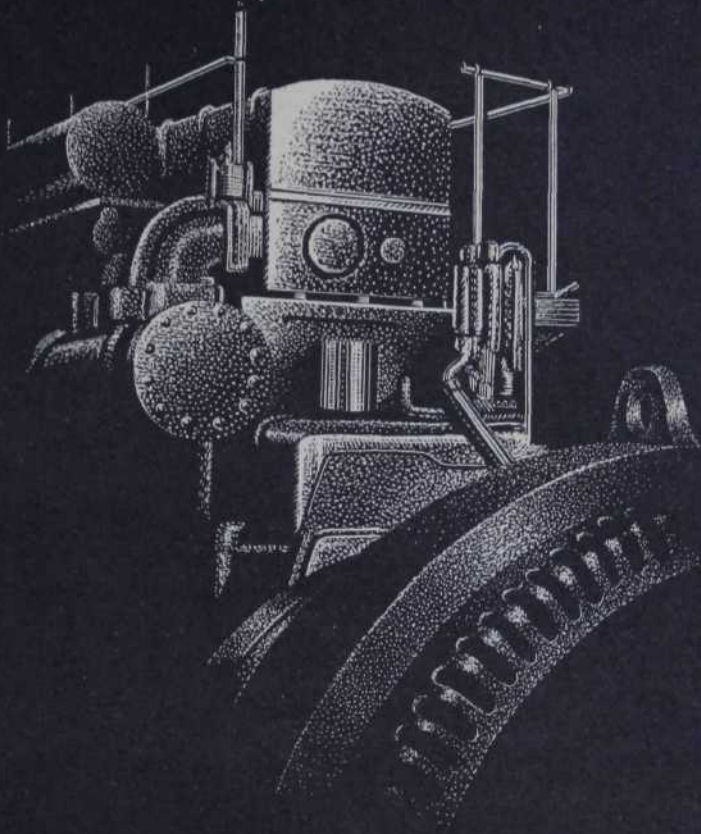
Information, please

COMPARED TO the writing business, says a midwestern editor, a trip to the dentist is a pleasure. We've asked the editor for the name and address of his D.D.S.

Points for diamonds

IF YOU LIVE in Holland you must take a ration coupon along when you buy a diamond, ruby or other precious stone.

EXAMPLE OF *Service*:



A large company put this problem to one of our Cities Service Diesel Lubrication Engineers: "How can we reduce Diesel breakdowns that are seriously interfering with production?"

... Our engineer studied the facts and recommended a special Cities Service Diesel lubricant. In 38 months since, Diesel efficiency has been steadily maintained, with engine overhauls reduced by the amazing figure of 30%.

More and more, it's service that counts...

and

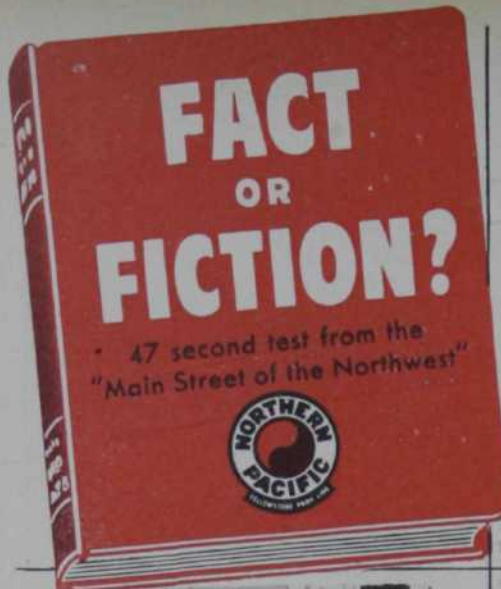
Cities Service

means good service!



CITIES SERVICE OIL COMPANY

ARKANSAS FUEL OIL COMPANY



Q. Northern Pacific engines annually use enough water for 150,000,000 baths. Fact or fiction?

A. Fact. Wells and tanks of the Northern Pacific Railway supply its locomotives with $4\frac{1}{2}$ billion gallons of water a year.



Q. Salmon canning industry is built on fish's homing instinct. Fact or fiction?

A. Fact. Millions are trapped on return to birthplaces in Alaska, Washington, Oregon rivers; more than \$11,000,000 worth shipped annually via the N. P.



Q. Cattle, sheep and hogs are native American meat animals. Fact or fiction?

A. Fiction. Columbus brought them. In 1943, packers shipped more than four hundred million pounds of meat via the Northern Pacific Railway.



Q. The second largest U. S. Naval Training Station is on Pacific seaboard. Fact or fiction?

A. Fiction. It is on Lake Pend Oreille, in a mountain valley at Farragut, Idaho, five miles from the main line of the Northern Pacific Railway.



Q. Teddy Roosevelt tamed Western outlaws along "Main Street". Fact or fiction?

A. Fact. He served as deputy sheriff at Medora, N. D. on the Northern Pacific Railway, known to shippers and travelers as "Main Street of the Northwest".



NORTHERN PACIFIC
MAIN STREET OF THE NORTHWEST

The Germans have added not only jewels, but valuable art objects to the ration list—in a land of acute shortages of life's necessities.

The explanation is that Dutchmen who want to invest their meager savings in something safe have been buying up jewels and art treasures faster than the Nazis can remove them to Germany. Stock exchange transactions have been stymied by Nazi-fixed maximum prices. It's practically impossible to buy real estate, due to regulations and restrictions of the occupation government.

In earlier times the Dutch, under similar circumstances, hoarded gold. They can't do it now, because we "beat the Dutch" to it.

It can happen here

AN OUT-OF-TOWN subscriber dropped into our office the other day to speak a kind word for wartime Washington. He had purchased two drinks at a popular place of refreshment, and proffered the waiter a tip after each.

For the first tip the waiter courteously said, "Thank you." But he declined the second, saying:

"You forget, you tipped me the other time. That's enough."

There's no particular point to the story, except that it's different. So was the waiter.

Good news for Joe

F. R. LACK, vice president of Western Electric, told the FM Broadcasters Inc., meeting awhile back:

"I am happy to say that we have nothing new to show now and nothing new to talk about. I am happy because I do not have to tell a soldier named Joe, who needed a radio very badly last month, that we could not deliver it because we diverted some engineers and some shop people to building the model of a new super-duper FM equipment to show you and thus strengthen our post-war position. . . ."

He also said: ". . . we delivered \$129,000,000 worth of FM to Joe. In this connection I should like to digress a moment and tell a story that has not been told before. When the Army came to us and asked for FM equipment I went to Major Armstrong who holds the patent for a license. He said, 'As you well know, I served in the last war but they won't take me for this one but I should like to do my bit. You can build all the FM you want for the Armed Services and the license fee will be one dollar.' I take off my hat to him. I don't think anyone would have begrudged a reasonable license fee to the Major to help him pay for his continued experimental work and the operation of. . . ."

Bragging again

"YOU Germans have learned fanaticism from me," declares Hitler. "Accept my assurance that the same fanaticism inspires me and that it will never leave me." Which is double for: "I'm nuts and I'm proud of it!"

INSPECTION PROBLEMS?

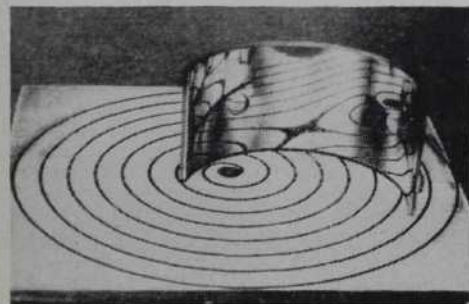
Here's how Controlled Lighting saves time on tough inspection jobs



G-E REFLECTOR LAMP

REFLECTING MIRROR

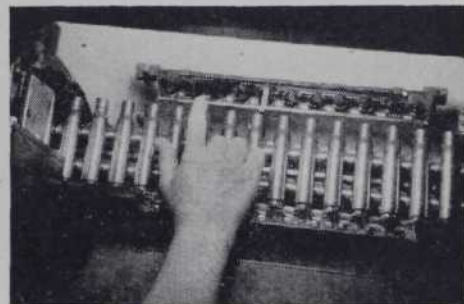
TO look inside a 75 mm. shell was difficult . . . until G-E lighting engineers helped work out a faster, more accurate inspection method. A standard G-E reflector lamp with a mirror arrangement "turns shells inside out"—makes sure there's no grease, dirt or pitting. It's a typical example of inspection methods that use controlled lighting . . . and it's another instance where G-E engineers have helped to gain faster, better inspection methods.



1 Brightness contrast patterns are useful for the inspection of chatter in polished metallic surfaces. Reflections reveal defects of unevenness and other irregularities.



2 Luminous panels permit accurate checking of cloth seams, weave and finish. Shown above, this type of inspection permits accurate examination of all seams in pilot parachute manufacture.



3 An inspection unit developed specifically for cartridge case inspection. It makes use of reflected light from mirrors, showing the interior and primer cup end of the cases.



In these special applications—or in standard lighting installations—be sure you get the utmost in dependability and operating efficiency. Look for the famous G-E monogram on all the bulbs you buy. It's your assurance of best results for every lighting purpose.

Send For New G-E Booklet That Gives The Facts On Lighting For Inspection. Write to General Electric Co., Dept. NB-5, Nela Park, Cleveland, O.

LET'S ALL BACK THE ATTACK—BUY ANOTHER BOND THIS MONTH!

**"TO MAKE LAMPS
STAY BRIGHTER LONGER"**
The Creed of G-E LAMP RESEARCH



G-E MAZDA LAMPS
GENERAL ELECTRIC

Hear the General Electric radio programs: "The G-E All-Girl Orchestra" Sunday 10 p. m. EWT, NBC; "The World Today" news, every weekday, 6:45 p. m. EWT, CBS.

NATION'S BUSINESS for May, 1944

EXCERPTS

from the Annual Report of the American Telephone and Telegraph Company for 1943

"THE WAR achievement of America is based on the heritage of freedom that America is waging war to preserve. The things we are fighting for are the things that will enable us to win. Our system of freedom of private enterprise has outmatched the productive accomplishments of every other country in the world, and our telephone service meets the requirements of American industry, and heightens its pace, because the telephone industry itself has had the stimulus of freedom."

"Above all, the complement of freedom is the sense of responsibility which telephone people call the spirit of service. In this war the spirit of service is the spirit of victory, and the men and women of the Bell System, in whom this spirit lives, may be relied on to do their utmost."

"OVER 53,000 Bell System employees are now in the armed forces—more than double the 25,000 who served in the first World War.

"The Western Electric Company, Incorporated, manufacturing branch of the System, expanded its facilities still further during 1943. It is the largest producer of electronic and other war communication equipment in the United States and is now engaged almost exclusively in the manufacture of this equipment which is playing such a vital part in the war.

"Bell Telephone Laboratories, Incorporated, the System's research organization, is the largest industrial laboratory in the world. As in the preceding year, substantially all its resources and the special talents of its scientists and engineers were devoted in 1943 to war research and development activities."

"The number of Bell System telephones in service at December 31, 1943, was 21,246,600, an increase of 1,233,700 for the year. * * * By the end of the year, there were 650,000 applica-

tions for main telephones which could not be cared for immediately because of lack of facilities."

"The number of long distance conversations handled by the Long Lines Department of the Company was 31 per cent above 1942, reaching the unprecedented total of nearly 150,000,000. This is 50,000,000 more conversations than would have been expected from normal peace-time growth based on experience of the past."

"The maintenance of a high quality of toll and especially of long distance telephone service presented the most difficult problem, because of shortages of facilities. Excluding short haul toll calls, which still average less than one minute to complete, the average speed of service for the year 1943 was 5.1 minutes, compared with 3.1 minutes in 1942. * * * The average speed of service in 1918, at the end of the first World War, was 17 minutes."

"At the end of 1943, there were 651,711 stockholders of record of the

American Telephone and Telegraph Company. This is 8,690 more than at the end of 1942. The average number of shares held per stockholder at the end of 1943 was 29. * * * No stockholder held as much as one-half of one per cent of the total stock."

"Bell System earnings on average total invested capital—long term debt and stockholders' equity—were 5.7 per cent as compared with 5.4 per cent in 1942."

"The total payroll of the Bell System for 1943, including the Western Electric Company and the Bell Telephone Laboratories, was \$967,410,000, an increase of \$119,026,000 over 1942.

"Since January 1, 1943, wage increases totaling \$30,500,000 on an annual basis have been put into effect and others totaling \$11,000,000 are awaiting War Labor Board approval. * * * Progression increases in wage rates normally made as employees' services and experience increase, not included in the above, amounted for the year 1943 to \$21,000,000."



Today

KEEP AMERICA STRONG ... BUY WAR BONDS

POWER TO WAGE WAR AND TO SERVE PEACE

FROM the very beginning, GM Diesels have been tested in the crucible of war. They power tanks, heavy gun tractors and bulldozers; submarines and subchasers; invasion boats and lighters. And everywhere, always, these weapons are proving worthy of the fine fighting men who are using them.

That is because GM Diesel operation is based on simple and sound mechanical principles. GM Diesel construction is exceptionally strong and uniformly precise—the way General Motors always builds.

When normal life and living are resumed, GM Diesels will be as ready to step back into private life and resume service in peace as they were to go to war. And you will find them as capable of sure, reliable, low-cost performance on the toughest jobs at home as they are on fighting fronts the world over.



ENGINES ...15 to 250 H.P. ... DETROIT DIESEL ENGINE DIVISION, Detroit, Mich.

ENGINES ...150 to 2000 H.P. CLEVELAND DIESEL ENGINE DIVISION, Cleveland, Ohio

LOCOMOTIVES ELECTRO-MOTIVE DIVISION, La Grange, Ill.

Tomorrow



America's farms are going to need GM Diesel power for their tractors. This sure, reliable, low-cost source of power will go far toward solving some of the farmer's most vexing problems. And not the least of these problems is to get more work done, faster and at lower cost in labor and mechanical power. GM Diesels will help.

ELECTRIC MILKERS PUT BUTTER ON CITY FOLK'S BREAD...

Pioneer trails of today are electric cables.

They open territory to new jobs—millions of jobs represented by electrical appliances and machines.

On a pound for pound basis, Alcoa Aluminum has a higher capacity for conducting electricity than any other metal. Because of the tremendous war-production of aluminum, metal for aluminum cables should soon be available.

The jobs created by the stringing of these cables will be, in themselves, small potatoes in the employment picture.

But—the fact that electricity will be more widely used because of them—that's giant stuff.

The wonders in electronics which Imagineers are engineering for the dream homes of millions of people, take for granted the ability of those millions to buy.

This is plausible only if the cash required is realistically low and the jobs created by the electrical wonders are sufficiently numerous.

To achieve this result, the new economics of Alcoa Alloys should certainly be considered in any electrical plans. Among the dozen

advantages of aluminum are strength with lightness in weight. Combine these with high electrical conductivity and the mixture presents the wherewithal to Imagineer a lot wider use of electricity.

You and we both have this war to finish first. But plans to make more future jobs are both proper and patriotic.

Whether your postwar plans are concerned with weight-to-area ratio of bus bars, or maneuverability of spot welders, or whatever—the uniformity of the aluminum you use is of utmost importance.

For that, you will of course lean on the long experience, the knacks, the controls, the accumulated knowledge that is Alcoa.

Fifty-four years of living with aluminum is at your command.

ALUMINUM COMPANY OF AMERICA,
2125 Gulf Bldg., Pittsburgh 19, Pa.

*Electrical
conductivity*

ONE OF 12 REASONS FOR USING

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The easiest thing in the world to waste is paper

Paper has become a critical material. Our government asks everyone to conserve it. Business always has been notoriously careless of paper—now, under wartime acceleration, paper work is heavier than ever and waste has grown proportionately.

There is a practical way for business to reduce consumption of paper, to eliminate waste, and at the same time benefit by simplifying many office operations so that time is saved, labor lightened, errors reduced, and office output speeded up.

This may be done—is being done—in many government departments, at military depots, and in many varied businesses by a revolutionary wartime development—the Multilith Systemat. The Systemat carries constant information printed in reproducing ink. Variable data necessary to complete the document is compiled and typed or handwritten in. The entire form then becomes a master sheet which, placed on a Multilith Duplicator, produces a dozen or hundreds of accurate,

permanent, black-on-white facsimiles—every one an original. The Systemat produces purchase orders, job sheets, shipping documents, tally and packing slips—almost every type of form that carries repetitive data.

Learn how Multilith Systemats can serve you by letting a Multigraph man explain how Systemats work. Millions of Multilith Systemats are being used by U. S. military forces. Of course, their requirements take precedence over civilian demands. Addressograph-Multigraph Corporation—Cleveland. Sales agencies with service and supply departments in principal cities of the world.

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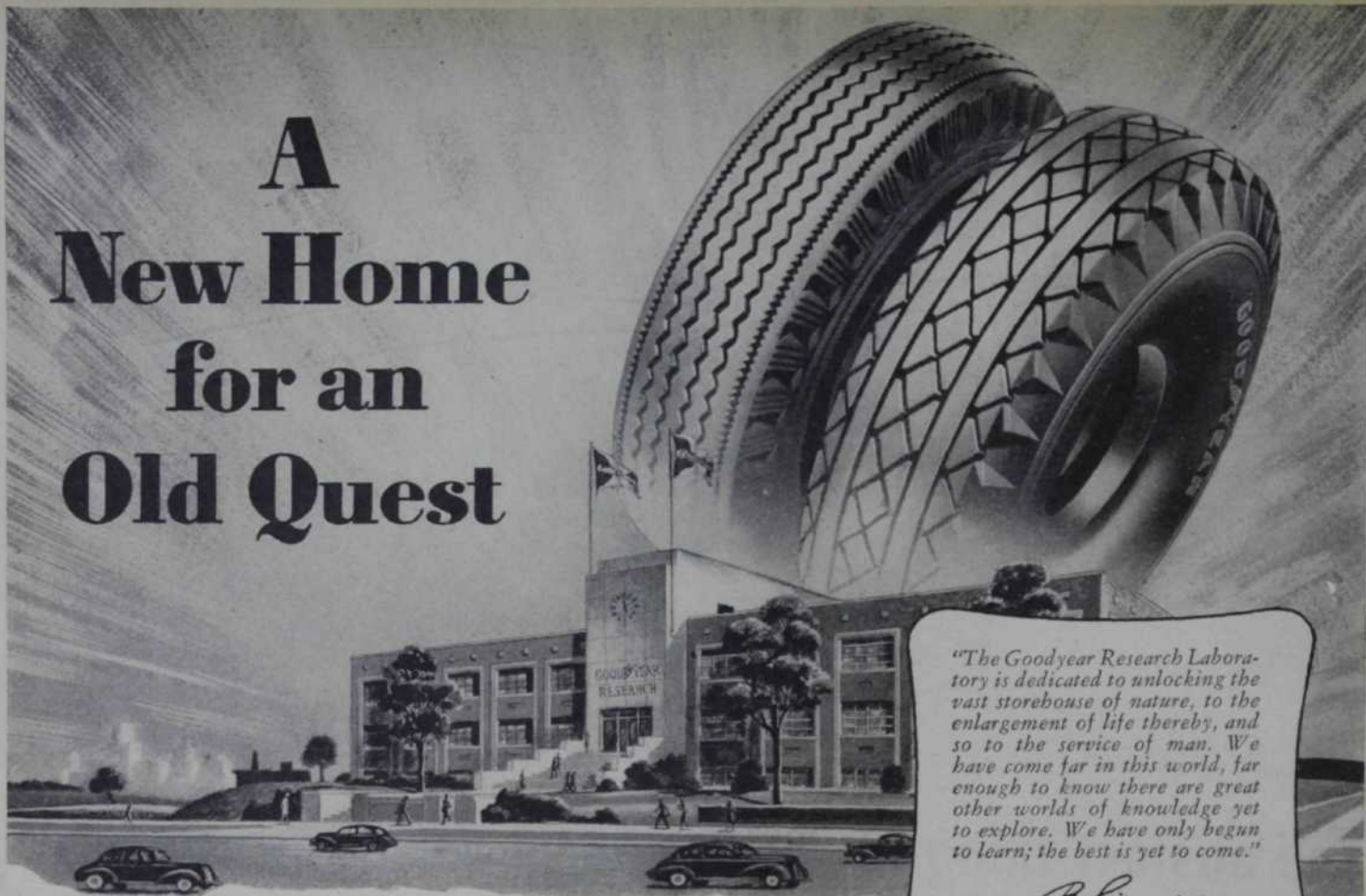
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Multilith Systemats Save Paper by—

1. Reducing Stationery Inventories
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6. Maintaining Legibility
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8. Utilizing Both Sides of Paper
9. Using Inexpensive Paper Stocks
10. Dispensing with Carbon Sheets

A New Home for an Old Quest



"The Goodyear Research Laboratory is dedicated to unlocking the vast storehouse of nature, to the enlargement of life thereby, and so to the service of man. We have come far in this world, far enough to know there are great other worlds of knowledge yet to explore. We have only begun to learn; the best is yet to come."

Whitfield

IT has always been a Goodyear working principle that nothing is good enough which can be made better.

And it has been Goodyear experience that the source of betterment is less often the materials used than what is done with them.

On this premise Goodyear since its earli-

est days has pursued research to advance the usefulness and value of its products.

It was this unrelenting quest for improvement which fathered the first straight-side tire, the first pneumatic cord tire for trucks and farm tractors, the first low-pressure tire for airplanes, the first American all-synthetic tire, plus a host of other Goodyear advances.

During this past year Goodyear dedicated a new home for its scientific resources — what is believed to be in personnel, facilities and equipment the finest laboratory for its purpose in the world.

Its bold and various activities now are concentrated on war products, but the lessons learned will inevitably enrich the fullness of life when applied to the needs of peace.

From the developments spurred by war, such possibilities are foreseeable as plastic glass, feather-light insulating materials, hundred-mile conveyor belt systems, plastic water pipes burstproof against freezing, metal-wood laminations for plane and car bodies, mildew-proof tents and awnings, static-free radio, crashproof fuel tanks, and many like wonders on which we now are at work.

Firm in its purpose to stand forth always as "science headquarters" of the rubber industry, Goodyear aims to make it true of its products; as of life in America, that "the best is yet to come."

A Few Milestones in Goodyear Research

- 1906 — Introduced the straight-side tire — the original quick-demountable tire. •
- 1908 — Developed the tire-building machine — made quality mass production possible. •
- 1913 — Brought out multiple-cord tires — greatly increasing mileage and dependability. •
- 1917 — Pioneered pneumatic truck tires — the foundation of modern truck and bus transportation. •
- 1922 — Developed Captax accelerator for curing rubber — a major advance in tire quality. •
- 1927-29 — Synthetic rubber patents — United States and Great Britain. •
- 1935 — Brought out LifeGuards — took danger out of blowouts. •
- 1937 — Built America's first all-synthetic rubber tire. •
- 1941 — After several years of pilot plant operation, established commercial unit plant for making synthetic rubber. •
- 1941-43 — Many secret military developments of wide postwar usefulness.

Captax, LifeGuard — T.M.'s
The Goodyear Tire & Rubber Co.

GOOD YEAR

THE GREATEST NAME IN RUBBER

Hear Goodyear's Two Great Radio Shows —
WALTER PIDGEON in "The Star and the Story"
— CBS — Sunday evenings. **"HOOK 'n' LADDER FOLLIES"** — NBC — Saturday mornings. See local paper for time and station.

MANAGEMENT'S

Washington LETTER

A last minute roundup by a staff of Washington observers of government and business

INVASION PROGRAM AND STRATEGY top all Washington action and planning—with crisis of World War II developing on 3 fronts in Europe and 2 in Pacific.

Your business for remainder of year will be governed almost entirely by war developments.

Military services will begin to relax major production controls as soon as ultimate invasion requirements are demonstrated.

Successful Allied bridgeheads in France, Northern Italy and Balkans will mark beginning of the last phase of war in Europe.

Pacific operations cover much territory these days, but keep your eye on two major objectives (1) severing of Japanese supply line to South, and (2) establishment of U. S. naval and air base on Chinese mainland—within direct bomber range of Tokyo!

► NEW PRICE CONTROL AMENDMENTS will put life-size brakes on discretionary authority of local and regional administrators—particularly on crack-downs aimed at unintentional violators. Congress says, in effect:

"Procedures for prosecution must follow established American judicial principles."

Death knell has sounded on Capitol Hill for OPA "kangaroo courts."

Administrator Bowles has promised simplification of rationing at every point possible—as exemplified in recent order eliminating compulsory tire inspection.

With such amendments and restrictions, OPA will be extended in present status.

► YOUR EMPLOYMENT OFFICE will find it helpful to develop advance acquaintance with a new federal agency—the Retraining and Reemployment Administration.

It will be in charge of all activities and policies demobilizing military forces and returning workers to civilian jobs.

More than 1,200,000 service men already have been discharged.

Veterans Administrator, Brig. Gen. Frank T. Hines, is head of the new Retraining and Reemployment Administration, with general program being framed by a policy board,—Labor Secretary Frances Perkins, plus representatives of Army, Navy, Selective Service, WMC, Civil Service Commission, and Federal Security Agency.

Legislation will be sought to establish mandatory employment preference for war veterans in industry.

Present agency was created by executive order and has no permanent status or powers for postwar operations. However, many routines developed in temporary status will be continued in postwar set-up to be established next year by Congressional action.

► LARGER FOOD RATIONS for workers in heavy industries become available May 1, under new OPA in-plant feeding regulations.

First application will be in logging camps, with workers allowed 185 meat-fat points a month, against 65 for average adult. Loggers also get 8 pounds of sugar monthly, against national average of 2 pounds.

These allowances computed jointly by WFA and OPA, on basis loggers need 5,500 calories daily, against national adult average of 2,500 to 3,000.

Similar calculations will be applied to all other heavy industries, and extra food allowances will be distributed through plant restaurants. For these rations, OPA has established a new industrial-user food classification, Group IV.

When program is completed, every major industry will have a food ration differential, pegged to the energy requirements of job classifications.

Special industrial ration applications may be made through your local ration board on form R-315. (These revisions promulgated in Amendment 10 to Ration Order 3 and Amendments 129 to Ration Order 16.)

► LOCAL WAGE RATES henceforth are to be determined by Regional War Labor Boards,

without interference from WLB. Under new policy, Washington will intervene only in exceptional circumstances.

Twelve Regional Boards already have determined "going local rates" for more than 2,000 classifications in various industries, plus several thousand minimum rates for unclassified individual occupations. These rates now are yardsticks for future local adjustments.

Transfer of this authority to Regional Boards represents a sharp departure from stabilization amending order of May 13, 1943, which vested bracket and regional rate determinations in WLB.

Delegation of this authority to regions allows once more for normal wage differentials between various states and sections.

► MANPOWER TANGLE has become more confused during last 2 weeks because of wavering policy and official indecision regarding relative urgency of military versus industrial quotas.

Military services have determined that more inductees, rather than more material and equipment, now is first requirement for vigorous prosecution of the war.

Advocates of universal labor conscription are using acute manpower pinch as a new argument for industrial draft legislation. Opponents of labor draft contend wasted manpower in government procurement policies would more than cover real military needs. (Average work week in all U.S. industries still is about 45 hours—compared with 66 in Russia, 72 in Germany, 54 in England, 62 in Japan.)

► CONTRACT TERMINATION program is caught in a whirlpool of Washington conferences and consultations.

Outlook is that no over-all policy will be formulated before November elections.

After enactment of termination legislation, Capitol Hill wants reconversion policy; then surplus plant and property disposal.

As war pressures mount daily, all postwar problems tend to drift into background of official attention.

Washington attitude—unstated but none-the-less real—is about this: "Why bother with postwar problems when so many immediate WAR problems press for attention NOW?"

(With crush of competing claims upon

his attention and energy, the President finds himself heavily overburdened and overworked—forced to let all but the most critical and urgent situations slide...sometimes tends to regard assignment of a big problem to an official "task committee" as the solution. White House intimates insist a way must be found to ease the Chief Executive's daily grind.)

► RUSSIA'S OFFICIAL REPUDIATION of "primitive Communism" is of profound historical significance as factor shaping postwar world.

Socialist dogmas of Karl Marx and Friedrich Engels have been formally modified in Russian economic policy by production incentives, "surplus value", rewards for enterprise, and a degree of competition in the management of both agricultural and industrial production.

The "party line" of U.S. Communists already has shifted rather violently from third party program to minority participation in Democratic and Republican national organizations.

Stalin's new program is modified state capitalism.

Significance: Stalin's new Russia strives for world power and authority through tangible production rather than organized revolutionary doctrines and academic social idealism.

► CIVILIAN PRODUCTION still is restricted in every industry, despite easing situation in most metals. Manpower is limiting factor, rather than raw materials.

During remainder of 1944 do not expect more tires, gasoline, coal, or basic chemicals. Military and lend-lease requirements in these items exceed original scheduled quotas. In certain synthetic rubber items there is a current shortage up to 25% of procurement schedule.

But you may expect more building construction for private account, more repair and maintenance parts for industrial machinery, more farm equipment, and more household appliances—all on a strictly controlled basis for both producers and distributors.

WPB Chairman Nelson is organizing a new Civilian Advisory Committee to draw up a balanced production schedule within framework of available manpower.

► ILLUSTRATING increasing lend-lease demand, Office of Foreign Economic

Administration reports that, out of total production of 58,000 combat tanks in U.S. up to January, 23,000 were shipped to other nations and 35,000 retained for our own use. Out of total production of 1,900,000 military motor vehicles, we consigned 750,000 to other nations and retained 1,150,000.

Unspent lend-lease authorizations now aggregate approximately \$45,000,000,000.

► SHOULD SOLDIERS AND SAILORS be permitted to vote in NLRB elections? Issue has been presented formally in petition of Botany Worsted Mills, where employees voted 1,797 for Union and 1,545 against.

Employer offered military addresses of 800 employees in armed forces, but NLRB ruled none could vote save those who appeared at polling place.

An absentee ballot in hands of these 800 workers might have changed result. Botany contended in petition for new election.

Tough nut:

If soldier vote in November elections was sufficiently important to require special legislation, why not equally important to provide an absentee ballot for union elections?

Several thousand plants have been organized by unions after government-supervised elections during past 2 years, without votes for service men.

► FOOD OUTLOOK is not changed appreciably from last year, but wheat prospects are bothering WFA planners.

New U.S. wheat crop estimated at 750,000,000 bushels. With July 1 carry-over, this will make available barely 1,000,000,000 bushels for 1944-45, against U.S. disappearance of 1,260,000,000 bushels in current crop year.

Food and Drug Administration has postponed for duration proposed federal standards for bread, on ground that "changes may later become necessary involving modification of bread compositions."

Baking and milling industries are cooperating aggressively to avoid brown "war loaf" favored by some government food advisers.

► LEND-LEASE FOOD SHIPMENTS must be curtailed, but reduction will be offset partially by U.S. scientific missions assigned to Africa and repossessed areas of Europe to stimulate increased crops through mechanized farming and modern soil utilization.

Missions also will endeavor to call out large native food hoards by direct

barter in areas where lack of banking facilities makes "invasion currency" impractical.

First scientific food mission, to Africa, estimates local production in that area can be trebled with U.S. machinery and methods.

► LABOR ABSENTEEISM increases with favorable war news, WMC finds. To check tendency of war workers to seek jobs in promising postwar industries, McNutt has approved proposal to offer postwar dismissal pay and high employment priorities to all who stick with urgent war work to the end.

Government would consider such employer commitments in termination settlements.

► LATIN-AMERICAN ECONOMIC PROGRAMS will be surveyed in great detail by Inter-American Development Commission's first meeting in New York this month. Commission seeks clarification of the role of private enterprise and of governments in initiating and carrying out large development projects.

Business and government representatives from 21 Republics signatory to Rio Good Neighbor Protocols will map complete integration of Western Hemisphere natural resources, and easy cultural exchanges.

Many emergency development projects stimulated by war will be organized on permanent basis, especially in tax policies, investment safeguards, exchange mechanisms, and slashing of burdensome international red-tape restricting trade.

This is sharp break with Old Europe's "empire" ideas, where Big Powers took charge with policy of exploitation.

► WASHINGTON BUSINESS BRIEFS: Army has broadcast appeal to industry for loan of 1,000 auditors and accountants to handle current contract termination routines. ...Rubber Director Bradley Dewey reports U.S. synthetic production is now at rate of 650,000 tons annually—about our average prewar consumption of natural; but expanding military demand leaves only minimum replacement tires for civilians....Navy measures our fleet force in horsepower, rather than tonnage; calls our present 65,000,000 horsepower "stronger than any combination of powers in the world."...WFA has moved 550,000 pounds of butter stored too long from 1943 production—unfit for direct consumption....WPB, watching amazing wartime energy of the stork, has released plastics for more infant rattles and teething rings!



A Story of Berkeley Square

IN London's old Berkeley Square, whose pavements William Pitt, Lord Clive and Alexander Pope once trod, a branch of an American bank came into being seven years ago. For a few too-brief years it served its original purpose. *Then Hitler struck*—and through the Blitz this office, one of the three London branches of the Chase National Bank, continued to facilitate the aid which America was even then extending to hard-pressed Britain.

Pearl Harbor raised the curtain on a new scene in the short history of this Chase branch. A new service was immediately inaugurated there. As a result, tens of thousands of men of our armed forces, G.I.s and generals, blue-jackets and admirals, are using this Chase branch in ways seldom associated with a commercial bank. Thousands of families throughout the United States are being cheered by

flowers, candy and other gifts from their boys overseas—the bank taking care of the orders by cable or airmail, without profit to it for the service.

This Berkeley Square branch is near the very center of American military and civilian activities in the British capital. Hence it has come to be financial headquarters for much of the personnel there. Checks are cashed daily for many members of our armed forces and funds are transmitted for them to and from the United States. The staffs of American missions and departments likewise utilize these convenient facilities extensively.

Thus the oldest American banking organization in London helps the men overseas keep their ties with their families at home. Berkeley Square has a new chapter to add to the many events its stately Georgian houses have seen...

THE CHASE NATIONAL BANK

OF THE CITY OF NEW YORK

HEAD OFFICE: Pine Street corner of Nassau

LONDON—Main Office, 6 Lombard Street; Branches, 51 Berkeley Square; Bush House, Aldwych

Your Government—in 194X

By JERRY KLUTTZ

1939
920,310
Employees

194X
1,500,000 to
2,000,000 Employees



GEORGE LOHR

After the war, Uncle Sam will continue to carry on many of his wartime jobs. Any way you look at it, we won't go back to the style of government we had in the 1930's

THE last shot to be fired in this war won't be the end of a big federal Government. Instead, it'll be the start of a peacetime superstructure undreamed of in prewar days. Our Government definitely won't be converted back to a prewar model. It can't be, even if we all wanted it.

In terms of appropriations, personnel, functions, and taxes we'll have a substantially larger peacetime government and it won't make a great deal of difference which political party is in power.

Based on various assumptions of the military and economic problems, responsible federal officials estimate that the annual postwar budget will range anywhere from \$20,000,000,000 to \$30,000,000,000. The Government will have 1,500,000 to 2,000,000 civilian employees, and it will maintain a large and costly Army and Navy. Many of the wartime functions will be perpetuated.

That, in brief, is the outlook for your federal Government in 194X, according to the views of informed Washington.

Someone recently defined a bureau-

FOR SEVEN years Mr. Kluttz has written a daily newspaper column devoted to government activities. One of the few reporters who includes every federal agency on his beat, he is conceded to know more government officials than any other writer. In this article he sums up the thinking of officials, many of whom will make the decisions regarding postwar government.

crat as a "person who'd rather plan to plan than plan." There's a lot of truth in that, but more recently the bureaucrats have adopted the philosophy that "he who doesn't plan is lost." It's accepted as gospel around Washington now that the agency that doesn't have a plan when the war ends will be either abolished or will be gobbled up by the agency with a plan. Consequently, each agency has its plan and its planners.

However, the planners, generally, are thinking of new functions and responsibilities, expansion rather than contraction. A head-on collision between the planners and the more conservative Congress can't be far removed. In fact, several clashes already have taken place. Congress has plans, too, and the major one proposes that it assume leadership in postwar affairs.

Fewer government employees

NEVERTHELESS, the Government already has started to demobilize. Employment is more than 225,000 under the wartime peak of 3,500,000 for all types of workers—volunteers, dollar-a-year people, and full-time employees—and Civil Service officials predict it'll slump another 200,000 full-time employees by July 1, 1945. And the transition to peace will be speeded up on the very day the

Axis collapses. But don't expect miracles. It'll be much slower than most people now anticipate.

The great bulk of the federal workers to be laid off in the first few months of peace will be in the government-owned and operated industrial establishments, the Navy yards and Army arsenals. It's obvious that this work will be cut back sharply. About 85 per cent of Navy's 700,000 civilians are engaged in industrial work, and a substantial number of the Army's 1,200,000 civilians would be involved.

Administrative agencies also will feel the impact of peace in the most drastic and sweeping reorganization of government in history. Agencies will be abolished, reshuffled, functions discarded, administrative reforms made, names dropped, and top policy-makers fired. However, few agencies will be abolished outright. The tendency will be to merge war agencies with old-line departments.

Only two agencies—Office of Censorship and the Office of Civilian Defense—are relatively certain to be wiped out in the first few months of peace, say those in Washington who should be in a position to know. And a third—the Selective Service System—will fold up fast unless compulsory military service is continued.

In 194X the Government will have

fewer agencies and these mergers can be expected:

Consolidation of War Foods Administration with the Agriculture Department;

Office of Defense Transportation to be made a part of the Interstate Commerce Commission;

Office of Inter-American Affairs to be transferred to the State Department;

War Shipping Administration to be made part of the Maritime Commission;

Office of Scientific Research and Development to be transferred to the research units of the Army and Navy;

National Inventors Council to be merged with the Patent Office;

Solid Fuels Administration and the Petroleum Administration for War to be made divisions in the Interior Department;

War Manpower Commission (what's left of it) to be shifted to the Labor Department with the possible exception of the Employment Service which is most likely to be returned to the Federal Security Agency;

Community War Services to be merged with the Public Health Service;

Office of Strategic Services to be shifted to the War Department, and Smaller War Plants Corporation to be transferred to the Commerce Department where it will work with the Reconstruction Finance Corporation.

With each merger, the war functions

both agencies to the Commerce Department.

The transfer of either agency, however, will meet with bitter opposition. The opposition, in fact, already is forming. It's being said that industry would look upon the transfer as a step toward perpetuating the wartime regimentation of business. This school believes that both agencies should be continued as independent war agencies only so long as necessary and then wiped out.

Transfer means pay cuts

THIS view is supported enthusiastically by a group of WPB employees after they discovered the transfer to the Commerce Department would result in pay cuts for most of them. For example, the top salary in the Bureau of Foreign and Domestic Commerce is \$8,000, paid the director. WPB has scores of \$8,000 salaries.

On paper, too, is a blueprint for the merger of the War and Navy departments into a single department of national defense. It's a long-range plan and it wouldn't be considered seriously until several years after the war.

But the planners—non-military people—say this offers the greatest possibility of economy in the postwar era. A unified military could use the same airfields, warehouses, research laboratories, recruiting stations, and other facilities.

public members—into any agency satisfactory to all three elements. Further, it's fully expected that this agency won't be made permanent but some sort of compulsory arbitration function may be given it by Congress.

The Alien Property Custodian will be many years winding up its work and it may land in the Justice Department like its predecessor after World War I. The chances are good that Foreign Funds Control, now in the Treasury Department, will be merged with APC.

Foreign Economic Administration is a cinch to be made permanent, though it'll be tied in much more closely with the State Department, especially its foreign functions. Another function that's due to be controlled by the State Department is the foreign broadcast work of the Office of War Information. The domestic activities of OWI will be sent back to individual agencies.

Some agencies will grow

BUT all federal agencies won't be reorganized and shrunk by 194X. Many will be even larger than they are now. For example:

Veterans Administration: This agency will have the tremendous job of looking after war veterans, millions of them. It has 48,000 employees now and can be expected to grow to 100,000, perhaps 125,000. Consider that this agency has 85,000 hospital beds now and it estimates its needs in 194X to be 300,000.

General Accounting Office officials foresee a peak strength of 15,000 employees to audit the cost of the war that'll take years. The agency now has 11,000 employees.

National Housing Agency will be busy in 194X helping fill the home shortage and disposing of wartime housing. But between now and then its public housing operations will be subjected to a powerful attack by private builders who want public housing killed. NHA's Federal Housing Administration will be revived in a big way after the war.

Federal Works Agency will be called on to build many public works in 194X. Like NHA, the extent of its activities will depend on economic conditions. And like NHA, too, the scope of these public works is under fire. A drive is being made to restrict the federal Government to federal works—such as post offices, flood control projects, veterans' hospitals—and to keep it out of purely local community projects such as water-

works, schools and sewer systems. Public works will cause the Interior Department to boom, too, after the war. A bloc of western senators already has ordered the department to have a minimum \$3,000,000,000 reclamation program on deck for immediate postwar consideration. The long-range reclamation and power programs of the department

(Continued on page 69)



When peace comes, the war agencies will be merged with old-line departments

of these agencies will be trimmed down.

A streamlined War Production Board and Office of Price Administration are most likely to be continued for several years after the war, the WPB to control allocations to industry during the transition period, and OPA to keep the lid on prices until industry can meet the demands for consumer goods. Plans are on paper for the eventual transfer of

The possibilities for savings are immense and interesting and the economy advocates of the peacetime days are certain to study the matter.

Few war agencies will escape reorganization no matter how vigorously they resist it. One probable exception is the National War Labor Board as it would be difficult to put this sort of a bureau—made up of business, labor and

General Hurley, Roving Envoy

TOURING the world as roving ambassador for the President, he found a friendliness toward the U. S. that convinces him our way of life is best

THIS COUNTRY'S long-range objective after the war is to continue friendly and mutually helpful relations with other nations with an honest appreciation of the part which each has contributed to victory. That victory will be the dawn of a changed world in which the United States must be ready to take the share which destiny offers. Distant lands and people of many races and creeds must see the great contributions which the United States is making and the good will of today must be carried into the future.

Those are the opinions of Maj. Gen. Patrick J. ("Pat") Hurley, probably the most traveled man that this war has produced. As ambassador and troubleshooter for President Roosevelt he has been on almost every front where America has troops or supplies. When he speaks of what he has seen he drives home his arguments in the same frank and direct style he learned as a cowboy and miner when a boy in the Choctaw nation.

Lend-lease is hidden

HE visualizes the American contribution to the war effort as coming from 135,000,000 individuals, each going without something to make it possible. After the war, we will need the friendship and appreciation of those we have helped. As a nation and as individuals, Americans are entitled to that appreciation because each is helping pay for it.

But, while officials and the well-informed in other countries know that the help they are receiving—food, clothing, tractors, new highways—is coming from America, the millions of common people frequently do not know.

When our lend-lease supplies first arrived in Iran, for instance, those destined for the Soviet Union were turned over to that country's representatives while the only agency existing to distribute civilian lend-lease in Iran itself happened to be the United Kingdom Com-

mercial Corporation.

And in Saudi Arabia, where hard money is the only legal tender, more coins were needed. Lend-lease set aside \$5,000,000 of bullion, American silver, paid for by Americans. But the new coins were minted first in Great Britain. Later others were made in Philadelphia but, if all had been coined in the United States with the imprint of our mint on each one, Arabs for generations would think of and thank America every time one of those coins crossed a palm.

However, says General Hurley, since the arrival of James M. Landis in the Near East as a representative of our State Department and our Foreign Economic Administration, a great job has been done in protecting American interests although only a trickle of personnel has gone to him. An organization of 5,000 may be needed if all details of lend-lease distribution are to be in American hands.

It may be a job for the Army. The uniform would be an American trademark with every package.

General Hurley's visit to Saudi Arabia was arranged through the countries' representatives in Cairo in May, 1943. The visitors were lodged for five days in the guest palace at Badia oasis on the outskirts of Riad, the capital.

He regards Ibn Saud, the desert chieftain, although he has seen little of the world outside his kingdom, as one of the



CHASE-STATLER

Patrick J. ("Pat") Hurley, lawyer, banker, oil operator and business man, veteran of two wars, from private to general officer; he was Secretary of War under a Republican President, and Minister to New Zealand under a Democratic President

great men of our time, forceful, intelligent, and a peer of the other great, a temporal power of the Arab world and a spiritual leader of the faithful of Islam.

Ibn Saud is not a picturesque desert chieftain thirsting for gold but a ruler eager to develop his country in keeping with the age. He wants highways, irrigation, tractors, trucks, even food. In return, oil is his most valuable resource.

General Hurley knows oil. Having lived in what is now Oklahoma since his birth in 1883, having been an oil operator and almost continuously a legal representative of oil companies, petroleum has been his favorite perfume from the cradle.

After the Mexican Government expropriated the oil properties of the American operators, he was sent to Mexico

City by Sinclair and four other companies to negotiate with the Government. A settlement was reached that was satisfactory to Mexico, to the companies and to our State Department. From that experience with American operations in a foreign country he concluded that one reason for expropriation was the Mexican Government's fear that the companies were operating to get out their profits as quickly as possible and with too little regard for conservation of natural resources.

Naturally he talked oil with Ibn Saud although the much-discussed pipeline was not mentioned.

Business no political threat

HE found the desert ruler friendly to the United States, chiefly because it is not a political threat. In the past Ibn Saud has granted oil concessions to Americans though, on many occasions, the British, Germans, French, Italians and Japanese made higher bids. American representatives of oil companies have done much to cement good relations in addition to paying millions for concessions and in advance royalties.

The American companies have prospected in Saudi Arabia since 1933. When this war broke out, they were shipping oil and starting an expansion program. The American-Arabian Oil Company, owned by Texas and Standard of California, already has proven several fields in Saudi Arabia while Gulf has a field at Koweit. A pipeline, whether its outlet is at Haifa, Tripoli or Alexandria and whatever countries it crosses would serve both concessions.

General Hurley foresees that, after this war, American interests abroad will be greater than ever and he believes our Government must protect American interests.

General Hurley's first uniform was that of a private in the Indian Territory Volunteer Cavalry in 1902. He was out of the Army long enough to become a lawyer and—among other things—assist in the birth of the United States Chamber of Commerce. With Harry A. Wheeler, its first president, and the late Charles Nagel, then Secretary of Commerce, he put in the hot summer of 1912 in Washington writing the Chamber's constitution.

Back in uniform in the World War, he saw action in the Aisne-Marne, St. Mihiel and Meuse-Argonne offensives and came home with the rank of Colonel.

He started winning the title of this war's most traveled man in the fall of 1941 when he was recalled to active duty. He was in Venezuela on business at the time of Pearl Harbor. Three weeks later he was ordered by the Chief of Staff, General Marshall, to get ships

and run supplies through the Japanese blockade to General MacArthur at Bataan. General Hurley still looks upon this service as one of the most interesting episodes of his career. On the day of the fall of Bataan, the Secretary of War, Mr. Stimson, told the press, "General Hurley was very successful. He obtained several shiploads of supplies which got into the Philippines and part of which reached Corregidor and Bataan. But for every ship that arrived he lost nearly two ships."

His headquarters kept moving from Java to Australia, one jump ahead of Jap planes, but they finally caught up when his plane landed during an air raid. A scar on the right side of his head and an ear that does not pick up as clearly as before were the only damage which a few days in a hospital did not fix.

"Now that your head is damaged, you're qualified to be a diplomat," one of his army visitors cracked.

The General continued to New Zealand to present his credentials as Minister, the Senate having confirmed the appointment while he was in the Pacific.

He was not there long.

President Roosevelt sent him to Moscow to confer with Prime Minister Stalin and Foreign Minister Molotov.

Although the nature of his talks with Soviet leaders during his eight weeks in that country or the report of what he saw have not been made public, his visit provided a striking evidence of Russian confidence in America when Stalin ar-

ranged for him to visit the Russian front where no foreign observers had been permitted.

A Red Army plane with fighter escorts flew him with two aides—Col. Richard Park, then assistant military attache, and Major (now Lieutenant Colonel) John C. Henry, the General's aide—to the Stalingrad theater.

They were there for two days and, after another week in Moscow, were off to the Caucasus to observe the start of that offensive at Ordjonikidze, the old Vladikavkaz. Men of the Red Army did the fighting but their advance was on American wheels and American wings. As elsewhere in the world, General Hurley believes that the best foundation for future relations between these two countries lies in acquainting the Russian masses with the part America is taking in their struggle. The hospitable Russian officials already appreciate the assistance this country is giving.

General Hurley had gone to India and China to confer with General Stilwell and Generalissimo Chiang Kai-shek when President Roosevelt ordered him to attend the Cairo conference. From there he went to Teheran with the temporary rank of ambassador to establish liaison with the Russians and to assist in arrangements for the President and the American delegation. In this war, Iran is the crossroads of the Near East where the Soviet Union, Great Britain and the United States meet. Iran's confidence in the United States was known to him from previous visits.

Iran independence

IT seemed deserving that its postwar territorial integrity, political sovereignty and control of its natural resources, including oil, be guaranteed. President Roosevelt favored that. The result was the Iran Declaration. The signatures of Roosevelt, Churchill and Stalin are on the document.

In January of this year, General Hurley again was on the wing, this time to the snug mountain kingdom of Afghanistan. Foreign officers and men in uniform had been barred from the country and a British plane had been interned for three months when it made a forced landing across the border, but permission for the trip with a Douglas C-47 and in American army uniform had been granted by Afghanistan.

The incident was another demonstration of confidence in the United States though moves of other great powers may be suspect. Smallest of the three independent countries in Asia, Afghanistan walks gingerly between its two powerful neighbors, Great Britain and the Soviet Union, trying to hold off both at equal distance. The General's

(Continued on page 89)



General Hurley visits King Ibn Saud, who is trying to develop his country, Saudi Arabia

Business Can't Escape History

By DR. STANLEY PARGELLIS

IF A historian asked to see your business papers, you would refuse, but it might be a wise investment

FOR YEARS business men have thought their accomplishments were an effective answer to criticism. They have argued that the fact that business turned out goods and sent them promptly where they were needed spoke for itself. The achievement of business in this war would seem enough to clinch any argument.

But, by itself, it does not clinch it. The myth about business men can be as strong as, if not stronger than, business' record in the war. Myth has proved often in the past, and will prove often again, to be stronger than fact—to be, and this is no quibble on words, a fact itself.

The history of corporations is not dead and buried. It is as far from being dead and buried as it can possibly be. It is a large part of the living present. The fact that the history of corporations may be distorted has nothing to do with the influence it exerts; it only means that someone, ourselves or our children, will have to pay for the consequences of distortion. What men believe about the past influences their actions in the present.

One needs no profound psychological



EDWARD F. WALTON

Feudal aristocracies were knit by mutual loyalties. Business today adds to efficient teamwork a responsibility for the public welfare

knowledge to see that men do not act only on emotions and impulses which may be incited by a direct and persuasive appeal. They act also on underlying and not always apparent assumptions and convictions. These assumptions and convictions, however imperfectly thought out and contradictory they may be, are both inherited from the past and reinforced by men's understanding and interpretation of the past. A company of Japanese soldiers who commit suicide on a battlefield do it not merely because they have been told awful tales about American cruelty and are afraid; they believe also that suicide under such circumstances does honor to their emperor, their ancestors, their country and themselves.

One American soldier now and then might be, and has been, driven to suicide, but not a whole company. The American has not that kind of history behind him. No emotional appeal for suicide, however strong it may be, will work with an American. His inherited assumptions and his understanding of the past have nothing in them about suicide.

I suggest that the scores of American historians who write about the unfulfilled promises of American life are creating, or have already created, a conviction about American business in the minds of those who read their books or come in some other way within the circle of their influence. Historians themselves, of course, possess that conviction, support it by documents and reinforce it by logic and art. Its ingredients might be summarized as four:

Business today, as for the past 75 years, is guided by but one motive, which is not, save indirectly, the public welfare.

Business exercises now, as it did then, a disproportionate and sinister influence on courts and government officials.

Business is still wasteful, immoral, corrupt and scheming, and the common man needs protection against it.

Business must therefore be compelled by political action to change its ways or it will stand, as it has always stood, in the path of the plain people.

These are hard words; perhaps too hard. But a conviction about business, if one is being formed in this country,

ALTHOUGH he is at present a librarian, Dr. Pargellis has long been particularly interested in industrial developments, especially in the United States. A soldier in World War I, he returned to peace as a worker in the Willys-Overland factory before entering Harvard Law School which he left to go to England as a Rhodes Scholar. For 16 years he taught English, American and European history at Yale. At the Newberry Library, in Chicago, he is building a collection of materials on the economic, social and cultural history of the Midwest. The ideas he expresses here were first developed as a part of an address before the Newcomen Society.

needs to be bluntly described. For by "conviction" I mean an attitude of mind which admits of no questioning, which is beyond any argument except one of ridicule or of fists. That person is moved by a conviction who, when asked, "What do you really think about big business?" replies as a matter of course, "It stinks!"

I would warrant that such reactions are more common than most of us believe or would like to believe. Conversations with all kinds of people—newspaper editors, novelists, school teachers, working men—conversations which a plain man may have but are denied the executive, confirm for me this suspicion.

I offer one example:

There is a book, by H. S. Commager, of Columbia University, which has sold many thousands, has been used in schools and colleges for ten years, is the favorite book of its kind among teachers. Called "Documents in American History," it purports to give "the fundamental sources"; it is said to be a "larger and better-balanced collection than any predecessor."

Famous papers oppose business

IT CONTAINS the famous papers, the great speeches, the key pronouncements of American diplomacy, the leading Supreme Court decisions, the important political platforms. For the three-quarters of a century since the Civil War, years which mark the phenomenal industrial development of this country, it includes, besides other papers not germane to the subject, the resolutions of

the National Grange; the preamble of the constitution of the Knights of Labor; Henry George on the single tax; the platform of the Populist party; Coxey's—of Coxey's army—program; Bryan's Cross of Gold speech; Theodore Roosevelt on the trusts; the social creed of the churches; the platforms of the Socialist and the Progressive parties in 1912; excerpts from the 1915 Pujo committee report on monopoly; Wilson on the new freedom; the preamble of the Industrial Workers of the World; La Follette's platform of 1924; the leading decisions in industrial or labor matters since *Munn v. Illinois*; various acts of the New Deal—and not one single document which gives the attitudes, the arguments, the economic and political philosophy of business men.

If an uninformed but intelligent stranger, ignorant of American or other history, should read the story in these documents alone, he would necessarily have to deduce that the enemy against which all these different groups were arrayed, that is, corporate wealth, was—in the words of the Springfield grange of 1873—"detrimental to the public prosperity, corrupting in (its) management, and dangerous to republican institutions"; he would have to admit that the various adjectives used to describe this "invisible and intolerable power," such as "poisonous," "plundering," "merciless," "unprincipled," "extortionate," "cruel," "greedy," were justified by the noticeable absence of any defense.

This is the type of document which college students read to get the flavor of the past. They read textbooks to get a connected story and an interpretation of facts. For the most part, the textbooks agree on one general interpretation. This is it:

America once was a land of promises that men could enjoy the kind of living each wanted and was able to earn. In the 1870's and 1880's farmers and laborers pinned the responsibility for the failure of such promises on the new titans of business. In the 1900's the progressives, with irrefutable proof, laid bare the enemy as the trusts. The Square Deal of Roosevelt I, the New Freedom of Wilson and the New Deal all invoked, in increasing ratio, the powers of government, and with the support of the majority of the population, took necessary steps to crush or restrain that enemy and to return America to Americans. That is the theme on which the textbooks are written.

It is not entirely the fault of the writers. Like other men, historians are fallible and are often prejudiced and wrong. But they are all taught what the top of their profession is and most of them try to reach it. The qualities of being faithful to the docu-

(Continued on page 80)



If America is to fulfill its destiny as a business nation, youth must get an unbiased picture

Home Towns Plan Soldier Jobs

By DONN LAYNE

AS is generally the case, the citizens were ahead of federal and state governments in recognizing the need for effective demobilization and rehabilitation programs.

Long before either federal or state legislative bodies began to discuss mustering-out pay, retraining the disabled, veteran employment and educational aid, local citizens had been hearing about or talking with veterans of World War II. These ex-service men (now numbering almost 1,500,000) had been discharged for overage or medical reasons and returned to their communities to take potluck in the civilian economy.

For the majority, suitable employment was easy to find—so the potluck was not so bad; but it was not so good for some of the disabled and handicapped. So local organizations and whole communities began to take an interest in veterans' welfare. Congress took up the challenge.

Federal machinery set up for the veterans' benefit provides the discharged soldier with at least \$100 mustering-out pay, plus railroad fare home, and government assistance in locating a job. Those who are disabled or handicapped are restored as nearly as possible to their former efficiency, and have monthly pensions available—the amount depending on the degree of disability.

The Army, Navy and Veterans' Administration unite to carry on rehabilitation and occupational therapy, while the Veterans Administration has various plans and facilities for retraining and vocational education.

However, the main objectives—employment and job training—cannot be achieved effectively by programs carried on at the national level. The training of *human beings* for jobs, and the finding of jobs for individuals, whether aided by federal or state-federal agencies or not, can be successfully accomplished only at the community level—the grass roots!

Consequently, the effective return of discharged service men and women to civilian employment is, basically, the responsibility of local business and civic leaders—and theirs is no easy task!

After the last war the job of reabsorbing the 4,000,000 veterans to peace-time living was badly bungled. This time, the number of returning soldiers will be three times as great. Furthermore, the citizens as a whole realize that our fighters do not expect—do not

Rate of Demobilization

DEMOBILIZATION will be gradual rather than precipitate in character. It will extend over a period of two to three years—depending on the time required to liquidate the Japs after the Nazis are defeated. Industrial reconversion and reemployment are even now under way, and the process will be rapidly accelerated after the termination of the European conflict; and from six to seven million war workers and service men may well be demobilized before the end of the Asiatic conflict. According to the Brookings Institute:

“In consideration of all the factors a possible rate of demobilization, from the armed forces, war agencies, and industries combined might be somewhat as follows:

During 12 months following European victory..	6.4 millions
First 6 months after final victory.....	6.9 "
Second 6 months after final victory.....	2.5 "
Third 6 months after final victory.....	2.0 "
TOTAL.....	17.8 "

want—a public largess in the form of pensions or bonuses. They do want, and will insist upon, work opportunity and job security.

Therefore, an unparalleled amount of planning activity is being carried on by both public and private agencies. Of the many worth-while programs already functioning—or being set up—only a few can be mentioned.

Albert Lea Plan

BUSINESS leaders of Albert Lea, Minn., have set up a complete program for postwar rehabilitation. Surveys financed through their chamber of commerce have provided practical information as to probable postwar markets, farm income, financial condition, public works and employment needs. Results show that in spite of anticipated high demands for many goods and services, continued high levels of farm income and a much improved financial condition for the city, the country and local enterprises, probably 593 local workers will be without jobs after the war (from a total employment of about 6,000).

Since the essence of their plan was to “provide a job for every man who wants one at a living wage after the war,” the Albert Lea business men organized a “risk money” corporation, “Jobs, Inc.,” to create jobs for those probable 593 jobless workers. Capitalized at \$100,000, Jobs, Inc. is authorized to sell 1,000 shares of common stock at a par value of \$100 a share. Its incorporators are 16 Albert Lea business men. Its funds will be used to create employment in worth-while undertakings.

Birmingham Plan

BIRMINGHAM, Ala., approached the problem differently. Let them tell it:

“Any man (veteran) will come nearer achieving the employment he desires if he can have an interview with the head of the firm where he seeks a job. Even should the service man not get the job he will learn from a courteous and sympathetic source the conditions which prevent him from immediately achieving his ambition.

“This plan does not propose to set up
(Continued on page 72)

How to Deal with Three-Faced

By JUNIUS B. WOOD

SOLUTION OF THE LAST and biggest problem of our two-ocean war—what to do with Japan—can be both simple and practical.

By one easy formula, it will dispose of Japan as a world power, stifle Japan's heavy industry which is more synonymous of militarism than in any other country and release us from the impossible task of remaking the Japanese mentality.

More than that, it carries the decisions of the Cairo conference—to strip Japan of its colonies and territories—to a logical conclusion and makes the word quarantine, once used by President Roosevelt in connection with that country, more than a catchy campaign phrase.

The solution is to isolate Japan, to set its boundaries back to that drizzling "nubai" day of 1853 when Commodore Perry sailed into Uraga Bay. The preliminaries are more difficult than the conclusion because first its armies must be annihilated, its navy sunk, its bases razed and what is left of its aviation and 6,000,000 tons of shipping distributed including the floating canneries poaching in American waters.

The task is terrific but not impossible. I never was, and am less now, a believer

that Japan could be whipped easily or quickly.

I was in Japan when Tokyo and Yokohama were destroyed in the 1923 earthquake and again later when a younger generation in a greater Tokyo was rehearsing blackouts, fire control and rescuing imaginary gassed victims. Bombings will jar civilian morale and destroy hydroelectric and munition plants but will not start conflagrations like an earthquake which broke water mains and shook thousands of flimsy houses down on the burning charcoal of "hibachi" cooking noonday meals.

Plants have moved out

ALSO, since Pearl Harbor, not all heavy industry is in Japan. Many plants have moved to Korea and Manchuria, nearer to raw materials and scattered. The population of Mukden, once a scant 300,000, is now more than 1,000,000.

Once the war is won, the last act is easy. It will not accord with the "kind father" flavor in an American foreign policy which tries to reform all naughty nations and offers a ballot box to every wearer of a G-string. Nor will it appeal to those who want to debate the future

of the Emperor, overpopulation, the fate of militarists, Shintoism vs. Christianity, sowing the seeds of democracy and other academic topics. It will leave those headaches to Japan and keep her home until they are cured.

We cannot boss Asia. The less our hand, or Europe's, shows in guiding or dictating the future internal policies of Asiatic countries, the better it will be for us. Japan's battlecry, "Asia for the Asiatics," is there to stay and the war has revived slumbering nationalism and racialism.

The masses of the Orient see as clearly as we do that Tokyo interprets the slogan as "Asia for the Japanese" but we must realize that they will not accept an interpretation which substitutes other outside nations for Japan.

Eliminating Japan as the aggressor in Asia is our aim and we can nail that down by going further and strengthening China, Korea, the Philippines and others that are capable of guiding their own country and not disturbing the peace of Asia. Only one nation in that part of the world has the potential strength to replace Japan. That is China, ally of the United States today and a friend since the days of our forefathers. Not only friendship but the hard facts of mutual interests have joined the two countries, and both should start planning their future.

Isolation is the solution which Japan secretly dreads so much that it is never mentioned in press or broadcasts. Tokyo suggests other ideas to our policy framers. It wants a stalemate in the Pacific war. That will be a victory for Japan to which this war is merely an engagement in its age-long campaign to rule the world. Japan counts on Churchill's promise of partial demobilization and that the United States will be punch-drunk after the war in Europe is won. Japan hopes to compromise, give up a little and keep more, consolidate its gains and prepare for another stride forward. It has gone far in 50 years.

Japan's belief that its manifest destiny is to rule the world is as old as its unbroken line of emperors. Mythical Jimmu, who founded the dynasty on a mythical February 11, 660 B.C., promulgated the doctrine of "Hakko Ichiu"; Emperor Meiji, who modernized the country in 1858, repeated that "one ruler over the whole world is the will of our gods," and blinking Hirohito—latest descendant of the Pagan Sun Goddess, Amaterasu—rides his white horse along the charted road.

We may smile but that is the national



"One ruler over all the world"—that's the "will of a million gods"—and the goal for which every Jap will gladly die

JAPAN

HALFWAY measures won't do in settling with Japan. We must knock her out and then keep her penned up

goal for which every Japanese will gladly die, just as his ancestors have done and his children will do. Japanese, from high ranking ambassadors in fluent English to humble farmers in dialect of the plain people, all have assured me that this is the will of the million gods in their Shinto demonology.

Unless Japan's ambition is known, its militarism, diplomacy and commerce are never understood. Each follows its own peculiar ways but all work together for the glory which the gods have promised under a code in which life is cheap and might is right.

A change of weapons

THE soldier dies for the glory of his gods, his country and future generations. No mercy is shown to any who try to halt that glorious destiny. The imperial army and navy are only the striking power. Soon they may be reeling and the diplomats, able and amiable, will take over to salve the hurts.

Then *Daibatsu*, the big companies like Mitsui, Mitsubishi, Sumitomo, Yasuda and others which control finance, shipping, mining and industry as well as national policies, will quietly carry on the conquest. Other nations may think that the world is at peace but, for Japan, there has merely been a change of weapons. *Before her attack on commerce, nations with a higher standard of living are as helpless as the unarmed native before a Japanese bayonet. So the economic fight continues until the time is ripe to call the military back into the field.*

Japan has faces for all occasions, each one of which guides it along its chosen road of destiny.

Few Japanese realize the clever duplicity of their leaders. It is not surprising that outsiders do not. When I was with the forward-looking Kwantung army as it annexed Manchuria in 1931, the battlecry of the younger officers was: "We are not fighting for Mitsui but for the Japanese people." In the end, the big companies were exploiting the new territory as usual.

So-called peaceful expansion of Japanese rule closes that much more of the world to nationals of other countries.



CHARLES DUNN

Jap militarism, diplomacy and commerce follow separate ways, but work together for the glory the gods have promised

Manchuria is the most recent example. In Japan, foreign concerns traded through Japanese companies. Within a few months after Japan brought its version of "peace and order" to Manchuria, long established American banks, corporations and individuals had closed their offices and moved out.

This does not mean that Japan was closed to American commerce. Before Pearl Harbor our imports from Asia were larger than from any of the other four big geographical divisions into which our Department of Commerce divides the world. Our imports from Japan were double those from China. Those from now-occupied territories—Java, Malaya and Philippines—were half our total imports from Asia.

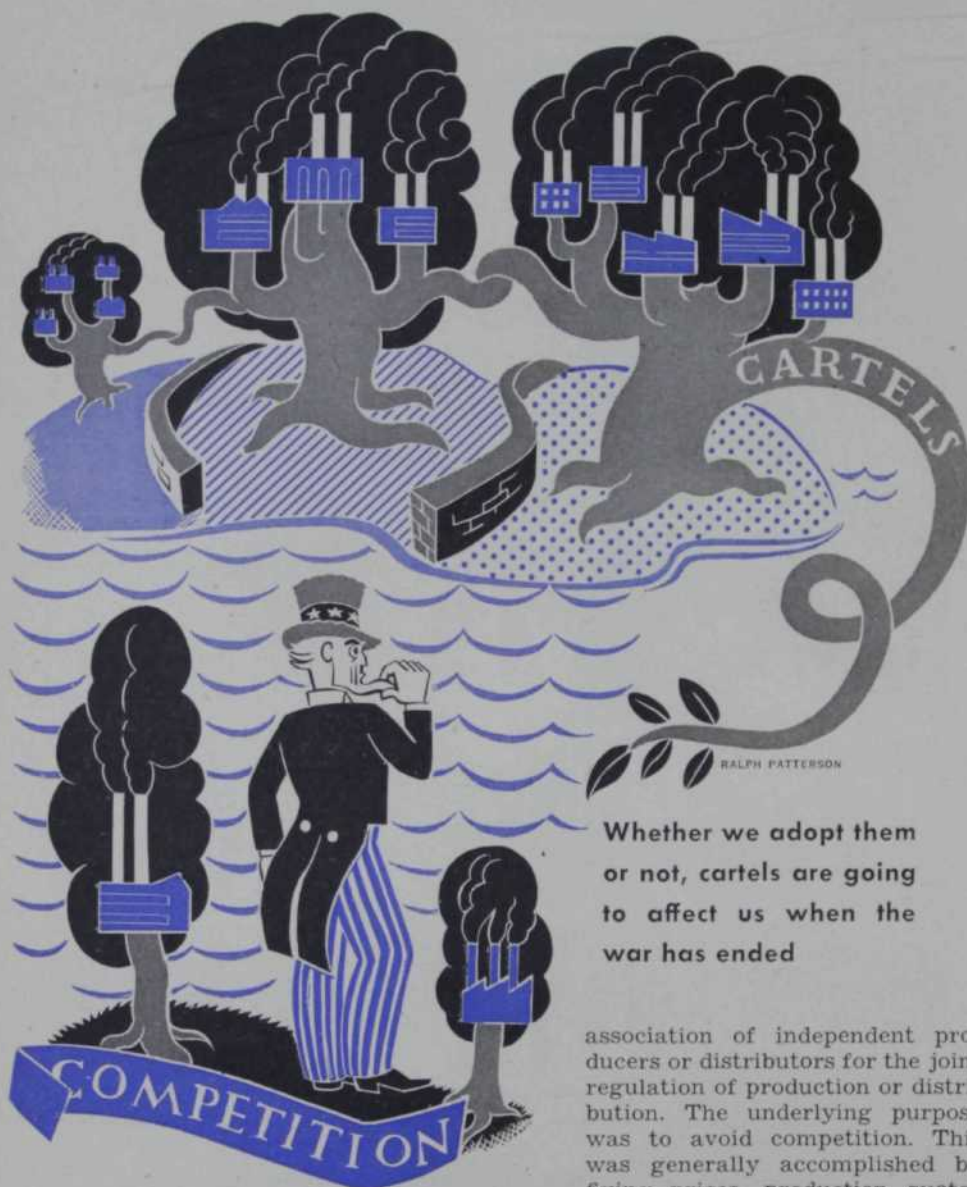
* Seventy-five per cent of the tin and 60 per cent of the rubber used in the United States came from territory which Japan now holds. Japan occupies only one-fifth of China's territory but that includes 40 per cent of the population, 65 per cent of the coal, 99 per cent of the iron, 30 per cent of the copper, most of the industry and all of the ocean shipping.

The Dutch East Indies, the Spice Islands of old, produced 99 per cent of the world's cinchona, 85 per cent of the pepper, 82 per cent of the kapok and a fifth to a third of the rubber, coconut oil, hard rope fiber, palm oil and tea. Since defeat will take much of this away from Japan, why not bar Japan from continuing as a middleman for any of it?

(Continued on page 68)

Cross-Examining Cartels

By L. G. DILLON



Whether we adopt them
or not, cartels are going
to affect us when the
war has ended

THE CURRENT discussion of the cartel question has become involved in confusion and ideology. Most speakers and writers imply that cartels are the devices of evil-minded and greedy men, rather than a type of economic organization well established in some of Europe's most highly developed countries.

Without accepting all the rationalizing of the European experts about the cartel's technical perfections, one may be justified in assuming that there must be some good reason why so many countries have made it an integral part of their economic structures.

Since a part of the present confusion grows out of the incorrect use of the term "cartel," a few definitions seem to be in order.

In its original form, before the advent of totalitarian regimes, the name "cartel" was used to designate a voluntary

association of independent producers or distributors for the joint regulation of production or distribution. The underlying purpose was to avoid competition. This was generally accomplished by fixing prices, production quotas and sales terms, apportioning markets, sharing of patents, or regulating any other factors that form the basis of competition.

The natural objective of any cartel was to include as many of the producers or distributors of a particular product as possible, the ideal being a complete

organization with no outsiders to disturb the harmonious relationship.

As a matter of practical experience, under normal conditions many cartels succeeded in organizing only a part of the industry or trade, but most of them fought outsiders by cutting off supplies, by boycotts and other strong-arm methods. In many instances, perhaps in most, the cartels maintained higher prices than would have resulted from a free play of economic forces.

The cartels probably also kept many inefficient producers in operation, thus giving efficient members an excessive profit.

Smoothed trade cycles?

ON THE other hand, the cartels claimed they helped stabilize the economy and prevent unemployment connected with cyclical fluctuations. This claim need be taken no more seriously than the claim that cartels encouraged improvements in production.

In Germany, with the advent of Hitler, the cartel became potentially or actually a compulsory institution, and all outsiders could be compelled to join if government found it desirable for the public welfare. Government could also take the initiative in organizing cartels for the benefit of the economy.

During the rearmament stage and the war, when the main objective was to increase production, and when the Nazi Government introduced many economic controls—including control of prices—the cartel lost its function as a factor in regulating competition, and was either abandoned entirely or used to implement government controls. In Germany the cartel's place was taken in some cases by a more centralized organization (*Reichsvereinigung*), resembling, except for the personnel which is still made up largely of business leaders, a government control agency. This, roughly, is the present situation in Germany.

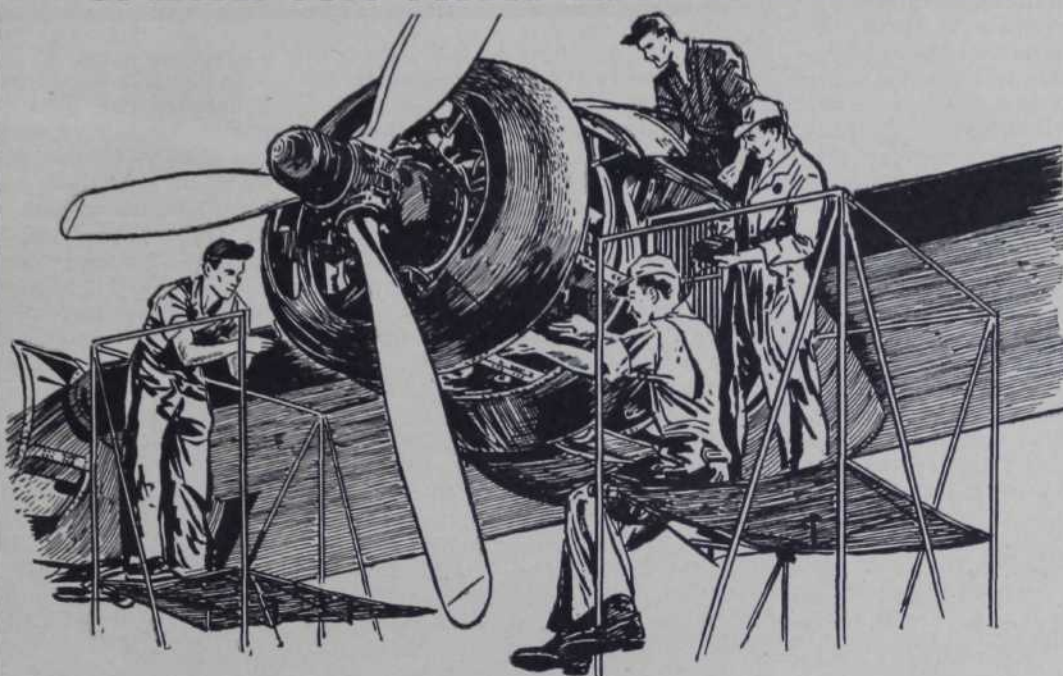
In neutral European countries the cartel has still retained largely its original form. In some of the occupied countries

"THE British want not only social security, but some of their business men want business security as well. They believe security lies in restricted competition . . . under government direction."

ERIC A. JOHNSTON

President, U. S. Chamber of Commerce, October, 1943

IF *You* WERE AN AIRPLANE ENGINE



IF YOU WERE an engine on a giant plane, you'd be checked and tested by experts at regular, frequent intervals.

You wouldn't question the wisdom of those tests, for the reasons are obvious: To discover and remedy or control defects while they are still little—to prevent forced landings.

Now, here's something to think about. You, as a *human being*, are far more complicated than the biggest airplane engine. And infinitely more

valuable—to yourself, your family, your country.

Periodic physical checkups will help discover possible troubles while they are little and, often, easily remedied.

A physician should make these examinations. An annual medical examination—particularly as you grow older and as doctors return from war service—is the sensible way to avert serious trouble... a possible "forced landing."

Get a Health Examination once a year!



THE MESSAGE reproduced above emphasizes the wisdom of periodic health examinations.

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it is mainly under German control and is used for war purposes.

It will be seen that this is an entirely different organization from the large combines in the chemical, electrical, and other German industries which have figured so prominently in recent cartel discussions growing out of the Department of Justice antitrust activities. It should be pointed out, however, that the big combines naturally occupy influential positions in the cartels of their respective industries.

The international cartel has fundamentally the same objective as its national counterpart, but is made up of producers or distributors in a number of countries. In countries with cartelized economies, the national cartel in a particular industry usually represents it in the international cartel. In other countries the national industry is generally represented by the most important producers. In the case of some important commodities—tin and rubber for example—the governments of the various participating countries may become parties to the agreement.

The most important international cartels were organized to deal with overproduction, which became pronounced after World War I, when certain industries found it difficult to adjust themselves to the reduced postwar demand.

Although Germany took a prominent part in organizing some of the postwar international cartels—notably crude steel, potash, nitrogen, zinc, and aluminum—some of the best known raw material cartels were organized without German participation. However, the cartel technique had reached a high state of development in Germany, and German

"EVERYWHERE we encounter a reluctance to take risks. Everywhere we find a strong belief in private ownership, and everywhere we see a scarcity of persons willing to become owners when risk is apparent.

"The demand for security is not confined to the disinherited."

EDWARD EVERETT CHASE

President, New England Council, September, 1943

methods indirectly influenced cartel organizations.

By and large, the international cartels are now either dormant or officially abolished. In any case, they have little opportunity during the war to perform their traditional functions.

The chief current interest in the international cartel lies in the impression that it may play an important part in postwar reconstruction. The difference in the tone of the discussion in this country and in Europe reflects the basic difference in economic psychology between the United States and the European Continent, and perhaps also England.

This brings us to one of the most important phases of the cartel problem, one which has received too little attention. Like any other important economic, social or political institution, the cartel cannot be studied apart from its environment. This applies particularly to the national cartel.

In its attitude toward national cartels, a country can pursue an autonomous policy. Certain countries, particularly the United States, have opposed this form of economic concentration, and have adopted proper means to prevent it. Other countries, particularly the highly developed European countries, not only have not interfered with it, but in some cases have actually encouraged it or forced it upon certain industries.

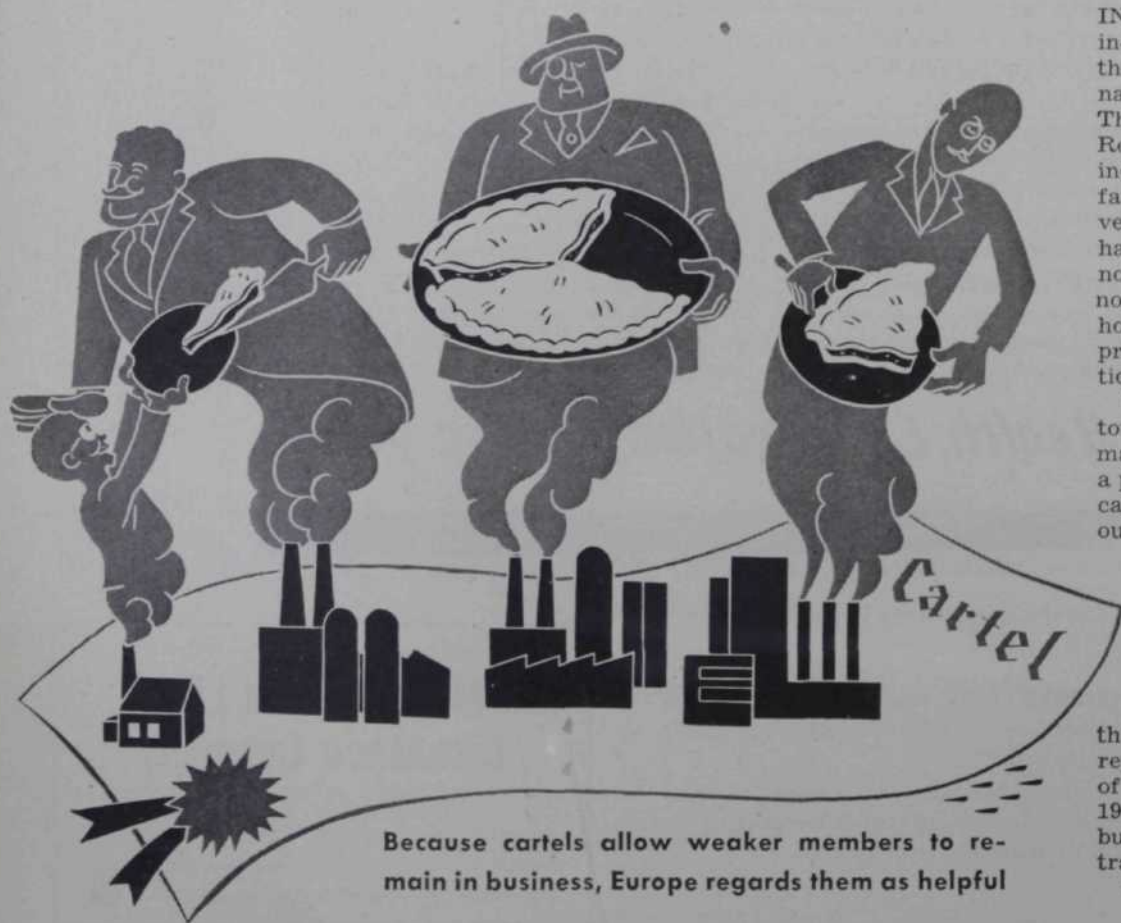
In Germany this was accomplished not only by the compulsory cartelization law of July 15, 1933, but long before that, in connection with the potash and coal industries. On the whole, Germany's traditional policy has been favorable to cartels, although it could not be described as a mere *laissez-faire* policy, since state supervision and intervention have always been more or less implied and, lately, actually enforced.

Tradition of individualism

IN England the whole tradition of industrial development is shot through with what we used to designate as rugged individualism. There was little in the Industrial Revolution and the period of British industrial ascendancy to provide a favorable environment for the development of cartels. On the other hand, the British Government did not attempt to interfere with economic concentration except by withholding from trade associations the privilege of enforcing their restrictions by law.

Not until 1918 did the movement toward economic concentration make sufficient progress to arouse a parliamentary commission, which called attention to the growing seriousness of the trend toward amalgamations and trade associations with price fixing and other restrictions. Since then, economic developments during the interwar period and the concentration movement for war production have accelerated the movement. A comparison of two reports prepared by the Federation of British Industries in 1942 and 1944 illustrates the trend of British business opinion on international trade policies.

The first report, prepared at the
(Continued on page 78)



Because cartels allow weaker members to remain in business, Europe regards them as helpful

Future Secretary of America...



She's still living in a world that dreams are made of.

Yet in reality she's learning to give wings to words. Her little, groping fingers are developing the skill she'll use in later years . . . the skill to put on paper the thoughts, ideas and ideals which, sent out into the world, may affect the lives and living of men and women everywhere.

But whether she becomes secretary to the President of the United States or to the president of some one-man business, her mind and her hands will help speed and influence whatever projects cross her desk.

Giving wings to words will be her job and she'll do it well.

For over 40 years Underwood has been "giving wings to words." The phrase describes the feeling inspired in secretaries by the speed, simplicity and accuracy of their sturdy Underwood Typewriters.

When new typewriters are again available and the time comes for your secretary to suggest replacing her old machine, give her an Underwood—one that "gives wings to words."

Her appreciation will show, daily, in the quality of the work she turns out for you.

Our Factory at Bridgeport, Connecticut, proudly flies the Army-Navy "E," awarded for the production of precision instruments calling for skill and craftsmanship of the highest order.



Underwood Elliott Fisher Company

One Park Avenue, New York 16, N. Y.

Makers of Underwood Typewriters, Accounting Machines, Adding-Figuring Machines and Supplies.



We're Crying Wolf in Oil Again

By WALLACE E. PRATT

Geologist, Vice President, Standard Oil Co., N. J.

PREDICTIONS of a petroleum shortage, made in 1919, have already proved 500 per cent wrong and only half of our possible producing territory has been explored

"Petroleum in the United States is a wasting asset. It is so far depleted as no longer to afford a secure foundation for the obligations based upon its assumed continued adequacy. Barring unexpected good fortune in the search for new supplies, or even less unexpected curtailment of consumption, our petroleum production is likely not only never again wholly to meet our requirements but even to start soon on the long decline of a waning output."

THAT QUOTATION is from the statement of a government official. However, it is no part of the present debate over our "oil shortage." It was made by the Chief Geologist of United States Geological Survey 24 years ago, and applies to the oil shortage during the first World War.

Today, in the opinion of Washington, "we are again running out of oil." We are told that the emergency is so acute that the responsibility can no longer be left to private initiative.

Yet, for 15 years before the present war, the American oil industry was continuously submerged in a flood of oversupply. Oil wells in the principal fields all over the country were "pinched in," their flow restricted to a fraction of their capacity to produce. Year after year crude-oil prices hung at about one-third their 1920 levels. State and federal authorities painstakingly prorated the available market outlet among the distressed oil producers.

The industry which had found it necessary to import nearly 400,000 barrels of oil daily to meet our demand in 1922, built up its proved reserves and capacity to produce until in 1932 and 1938 it was driven to export its excess at the rate of 500,000 barrels daily.

Furthermore, oil producers realize that if the war should end tomorrow they would again be obliged to shut in

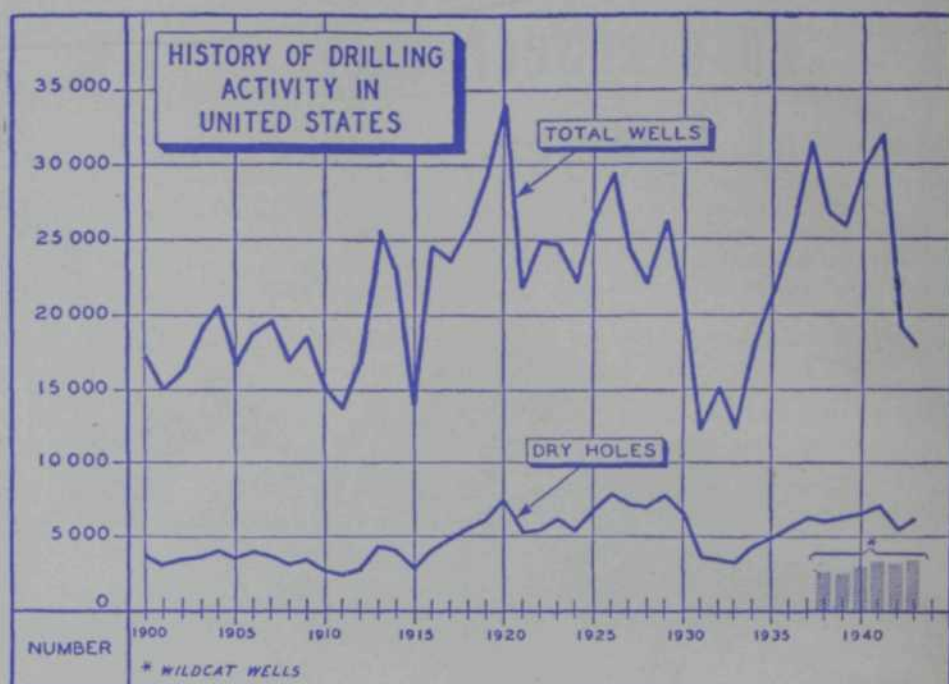


FIGURE 1

their wells unless we continue our exports, or cut off our imports, or both. So far the war has not increased our domestic production significantly. In 1943 it was only about 11 per cent greater than in 1940, the last full peace year. Is it strange that oil producers are skeptical of any impending oil shortage?

Authorities were wrong

BUT what are the facts about our oil resources? Why doesn't some authority tell us simply and definitely just how much oil we have to depend on? Then we will be able to meet whatever situation confronts us.

The answer is that authorities have told us repeatedly how much oil we have to depend on for the future.

In 1908 the United States Geological Survey, under the guidance of an enthusiastic Chief Geologist, David T. Day, estimating the oil resources of the country, placed "the minimum and maximum total yield" at 10,000,000,000 and 24,500,000,000 barrels, respectively. Since 1908 we have produced 26,000,000,000 barrels of oil and, if we add to this our present proved reserves, the sum is 46,000,000,000 barrels, or nearly double the maximum anticipated.

In January, 1919, the Geological Survey estimated the "quantity of oil remaining available in the ground in the United States" for future use, at 6,740,000,000 barrels. In releasing the esti-

mate, David White, Chief Geologist of the Survey, admitted that it might be in error by as much as 25 per cent but he also declared that:

"the progress of geologic examinations of the country and of exploration by the drill has gone so far, the principal factors of oil control are sufficiently proven, and the results of development are now so voluminous that it is highly improbable that the error is more than 50 per cent. An error of 75 per cent seems so improbable as not to justify serious consideration at present."

Since this estimate was issued, we have discovered in this country 43,000,000,000 barrels of oil. The actual error in the estimate is already more than 500 per cent and it is still growing!

In January, 1922, a joint committee of the United States Geological Survey and the American Association of Petroleum Geologists estimated the "total oil recoverable by ordinary methods remaining in the ground in the United States" at 9,000,000,000 barrels. Since January, 1922, we have produced 21,500,000,000 barrels of oil and we now have 20,000,000,000 barrels more in proved reserve; our total, therefore, is more than five times greater than this official estimate.

These estimates represented the best opinion available. We can now see that they were grotesquely inadequate but

(Continued on page 90)



wear it out—make it do—anything to beat inflation

Clearly, this family is resorting to heroic measures. But they have the right idea. Inflation is such a terrible scourge that, to beat it, almost any inconvenience or sacrifice is worth while.

You don't have to be a financial expert to understand the ruin inflation brings. It sends prices skyrocketing. It melts away your life savings. Each week it robs you of more and more of your pay check.

Right now our factories are devoted to war materials. Peacetime goods naturally can't be manufactured in the usual quantities.

But look ahead! Think how abundant all kinds of merchandise will be when we apply to them the manufacturing skill developed under the pressure of war. Things will be better than ever. Reasonably priced, too . . . **PROVIDED WE BEAT INFLATION NOW.**

What are some of the practical ways to beat inflation? Patch and repair what you have instead of buying new. Put your money in War Bonds instead of buying articles you can get along without. Pay off old debts instead of contracting new ones. Patronize only legitimate merchants who sell at ceiling prices. **SHUN** the Black Market.

Since 1849 through conflagrations, wars and financial depressions, no policyholder has ever suffered loss because of failure of the Aetna to meet its obligations.

WARS	CONFLAGRATIONS	DEPRESSIONS
1846 Mexican War	1835—New York City	1819
1861 Civil War	1845—New York City	1837
1898 Spanish-American War	1851—San Francisco	1843
1917 World War I	1866—Portland, Me.	1857
1941 World War 2	1871—Chicago	1873
	1872—Boston	1893
	1877—St. John, N. B.	1907
	1889—Seattle; Spokane	1921
	1901—Jacksonville, Fla.	1929
	1904—Baltimore	
	1906—San Francisco	
	1908—Chelsea	
	1914—Salem	
	1941—Fall River	

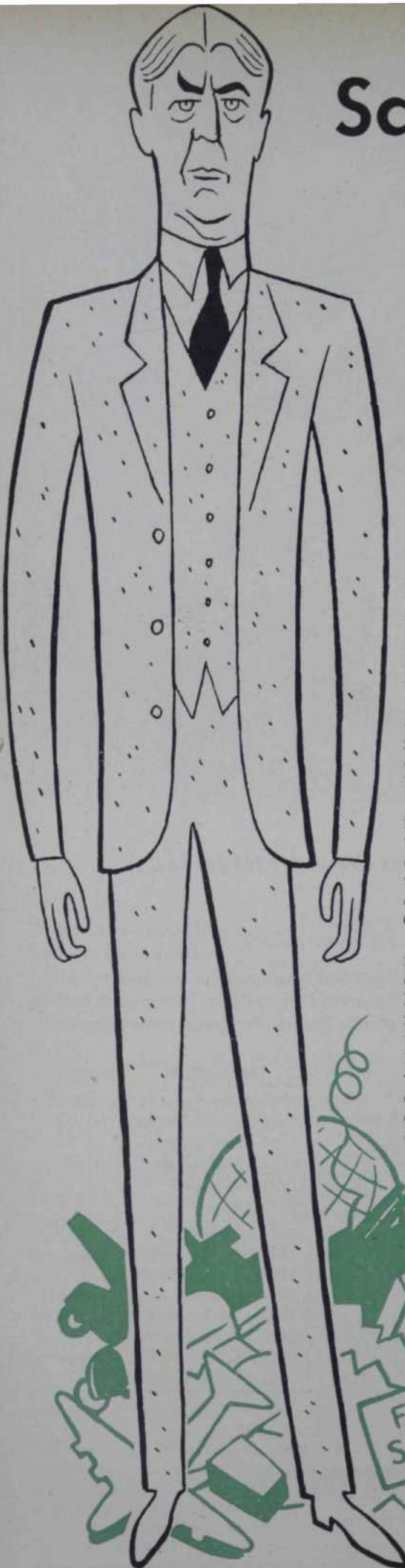


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NATION'S BUSINESS for May, 1944



Sales Manager for Uncle Sam's Surplus

By HERBERT COREY

WILLIAM L. CLAYTON'S job will be to handle the world's most incredible rummage sale at a good price and without disrupting the postwar economy

THE GOVERNMENT will soon put the world's greatest junk pile on the market.

Fifty billion dollars worth, more or less. No one knows. No one knows precisely what will go into that pile, or the cost or present value, or where much of it is. No inventory has ever been taken.

It includes practically everything that can be bought or sold. Hotels, dental floss, farms, artillery, factories, real estate, trucks, clothing. There never has been such a rummage sale.

William Lockhart Clayton will direct it. He is the Surplus Property Administrator. For a good many years he was one of the great merchants of this country. His firm made a one per cent profit on its transactions, and cleared \$1,000,000 a year.

That is important because a man who merely had ideas and energy and plenty of vocal resources and lacked the know-how of trade might do all of us irreparable harm. Clayton has the energy and the ideas and the know-how. He taught himself stenography at night. When he was 24 years old he resigned the position of assistant general manager of a great cotton selling company to go into the cotton selling business for himself. He

has never speculated—by his way of thinking. He is not known ever to have had a setback.

He never raises his voice. Most of those who know him speak of him as "Will." He is an extraordinary combination of gentle dignity and dynamics. He was the target in four senatorial investigations of the up's and down's of the cotton business. The printed reports run into thousands of pages. Only once did he show the least evidence of annoyance. When the same question had been blasted at him for the fourth time, by the same man, in almost identical words, Mr. Clayton gently wiped his forehead with his handkerchief:

"Really," he said, "I am almost on the point of losing my self control."

Withstood the inquisitors

SENATOR "Cotton Ed" Smith thanked him for his brilliant exposition of cotton's history, and Smith is notable for riving witnesses into slivers. Clayton had come to Washington to face the senatorial inquisitors without being asked. He had answered every question, thrown open his books, and in every way aided the inquiry. His only comment on the four investigations today is:

"Well, I'm still out of jail."

When he enters an office in which he is as well known as is Winston Churchill at No. 10 Downing Street he speaks to the girl at the reception desk hat in hand:

"I am Mr. Clayton."

He spends about half his time in travel. If he can do so he travels by plane. Air is faster than rails. Until he came to Washington he lived and breathed cotton. Mrs. Clayton—who was Miss Susan Vaughn of Kentucky—is a charming and spirited woman, who is able somewhat to moderate his tendency to be overserious. It is told that on one occasion she persuaded her highly concentrated husband to take a cottage in Maine for their summer vacation. Hardly had they reached this shelter from

CHARLES DUNN

What would you do with some 3,3,5-trimethylcyclohexanol-1?



textiles?



lubricants?



adhesives?



insecticides?



pharmaceuticals?



plastics?



EVEN we know only a little of what you might do with it... yet. Trimethylcyclohexanol (you pronounce it try'-meth'-il-sy'-klo-hex'-an-ohl) is a new industrial chemical by CARBIDE AND CARBON CHEMICALS CORPORATION...made with atoms obtained from common substances, rearranged into molecules that are not known to exist in nature.

What's this new synthetic organic chemical good for? No one yet knows all of the useful things it might be made to do. If you are technically minded you'll find some of the facts so far discovered in the italicized paragraph at the right. Whatever your interest, you will be glad to know that this new chemical has potential uses in the making of such things as medicines, plastics, lubricating oils, and adhesives.

In their service to industry as incubators for raw materials, the laboratories of this Unit of UCC are continually developing such new chemicals. An almost predictable percentage of them prove to be extremely valuable. Out of hundreds already developed have come scores from which scientists in industry have developed useful products of many kinds.

Some of the chemicals are used to make superior anti-freezes. Others are raw materials for quantity production of vitamins and life-saving drugs. Still others make possible improved cos-

metics, plastics, textiles, photofilm, insect repellents, anesthetics...and hundreds of things of benefit to you in your daily life.

Through continuing research which is developing new materials out of common substances, CARBIDE AND CARBON CHEMICALS CORPORATION is helping to make many things more plentiful or more useful. And the research of this one Unit...in that field which often must appear to the layman as "unknown chemicals"...gives you an idea of what the combined research of all UCC Units in many basic fields means to you.



As Trimethylcyclohexanol is one of the newest additions to this family of synthetic organic chemicals, its story is still incomplete.

It is an alcohol with a high boiling point (388° Fahrenheit). At room temperature, it is a white solid with an odor like menthol. It dissolves in other alcohols, gasoline, benzene, ethers, and vegetable oils like linseed oil, but does not dissolve in water. It can be supplied in carload quantities if and when the need arises.

Technically minded men and women can obtain information on the properties and uses of more than 160 other products of Carbide and Carbon Chemicals Corporation by writing for Booklet N-5, "Synthetic Organic Chemicals."



Model of Molecule
of Trimethylcyclohexanol

BUY UNITED STATES WAR BONDS AND STAMPS

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The Linde Air Products Company

The Oxweld Railroad Service Company

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Bakelite Corporation

Plastics Division of Carbide and



One of a series illustrating Cyanamid's many activities.

"...and take good care of Yourself"

Of all the people who use this parting phrase, none say it with more sincerity than mothers of boys off to the service of their country. And yet there is less need for saying it than ever before because our young men are better taken care of than any other similar group in history.

For example, the dangers from disease and infection, which took a greater toll than *all other* causes in the last war, have been hearteningly reduced. For much of this we owe thanks to the famed "sulfa" drugs—particularly Sulfadiazine, which has proved to be the most satisfactory of all this great line for many purposes. Already Sulfadiazine has become the "drug of choice" in the successful battle against pneumonia and a long list of other illnesses, including

streptococcal infections, osteomyelitis, gonorrhea, and septic complications of scarlet fever. And now it is the spearhead of attack against dreaded meningitis. As the "drug of choice" for this disease it has reduced the mortality rate from an average of 39% to less than 3½%. Especially encouraging are the results obtained by the prophylactic use of Sulfadiazine to curtail meningitis in army camps.

Sulfadiazine was developed clinically and introduced by Lederle Laboratories, Inc., a unit of American Cyanamid Company. Until recently, practically the entire output went to protect the lives of men in the armed forces. But now Cyanamid's expanded facilities

have made ample supplies available to all drug houses for distribution to the medical profession on the home front. Here is a dramatic example of how Cyanamid is advancing the cause of national health.



**American
Cyanamid Company**

30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

the world than a cotton crisis broke out all over the globe and Clayton went into action. At the peak of activity the one telegraph operator met Mrs. Clayton on the town's main street:

"Mr. Clayton," he said, "is a fine man. But he oughtn't never come to a place like this."

The Claytons live simply. Their four daughters are married and gone from home. Their private address is not to be found in Washington's telephone book. All I know about it is that as I sat in his office waiting to see him I could not help hearing his secretary put through the order for the morning milk at his home:

"I am speaking for Mrs. Clayton. After this please leave a quart of milk and a pint of cream each morning."

A moment later she corrected that order:

"Not a pint of cream. Half a pint of cream."

In 1940 Secretary of Commerce and Chairman of the Reconstruction Finance Corporation Jesse Jones brought William Clayton to Washington as an Assistant Secretary of Commerce and many other things. For years Europe had known Clayton as the King of Cotton. In this country men called him the Cotton Man. His firm handled 14 per cent of the American cotton crop, which is deployed over 30,000,000 acres and on which 10,000,000 citizens depend. Cotton is our greatest cash crop. Clayton's firm employed \$40,000,000 capital and it has been said of him that he had a telephone credit of \$150,000,000.

In a complex business

ANDERSON, Clayton and Company had branches before the war in every major country. The cotton business is the most intricate and most highly competitive merchandising undertaking. Allowing for the differing grades and types which in various permutations are required by the innumerable world's markets there are 740 different order-blank possibilities. The cotton factor must relate each buyer's inquiry to conditions of weather, transportation, labor, banking, markets, competition, and speculation.

When Clayton came to Washington, *Who's Who* insisted that something about him must appear in that list of the great and near great. Here is the information he provided.

"Clayton, William L., cotton factor, head of Anderson, Clayton and Company. Address Houston, Texas."

He is 6 feet 3½ inches tall, weighs 195 pounds, is as erect as a story-book Indian, broad-shouldered and narrow at the waist. He moves with a fluid precision that is appalling to the average city dweller. When he is at home in Houston—where he lives in a modest two-story brick house—he likes to gallop every morning.

"I like horses."

In Washington he has no time for pleasure. Therefore he walks two and one-half miles from his home on the edge of Rock Creek Park and is at his desk at 8:15.

"I couldn't make it without that walk."

When he crosses from his new office in the chromium-trimmed office building at Vermont Avenue and H Street to the White House he almost races. Vitality streams from him.

Now and then he takes a glass of light wine at dinner. Except for that mild indulgence, he does not touch alcohol or smoke or swear. His face is long, his nose aquiline—one keeps thinking of the story-book Indian—his black hair is now grizzling, his eyes are a clear gray-blue, and his cheeks thin, furrowed and weathered.

That is a glance at the merchant who will undertake to sell, at the least injury to the market, the most incredible pile of junk the world has ever seen.

An impossible task, perhaps. But he is an improbable man.

"I don't know how to rate you," I said. "Are you a New Dealer or a Democrat?"

"I am in hearty accord with the foreign policy of the President."

Opposed pegging cotton

MAKE what you choose of that. In fact, he has never been a New Dealer. He has urged that the law of supply and demand cannot be repealed. When the Hoover Farm Board tried to peg cotton prices, Clayton warned the Administration that not even the United States would be able to buck the law on a world-wide market. Two hundred farmers, congressmen, government officials, cotton factors and bankers met in Washington when the cotton peg was being considered. Only two voices were raised against the plan. One was Clayton's.

The Farm Board found itself with millions of bales on its hands and hanging over the market. When the New Deal came in, the effort to peg cotton prices by restricting production was evolved. The AAA paid farmers to plough under fields that would have produced 5,000,000 bales, under the sturdy opposition of the mules, who had been trained to walk between the rows, and thought everyone had gone mad when they were forced to step on the growing plants.

In 1936 the Supreme Court held the AAA restriction act unconstitutional, but the soil conservation act continued to keep cotton production low. The whole thing worked out just as Clayton had predicted.

Foreign cotton growers began to increase their acreage. Our farmers began to study the cotton business and raised more cotton on fewer acres. In 1937 the world crop was 25 per cent larger than ever before in history and prices skidded. Congress granted emergency loans, because the selling prices were below the cost of production. The South was in distress. Right back in the same old trouble it had been in when the pegging started, except that foreign production had almost doubled. Clayton's warning had been justified.

He is a strong supporter of Secretary Hull's plan to whittle down trade restrictions through trade agreements.

"That would be good for all business."

He says it is impossible to keep our cotton business at home. Cotton must



SURE, WE'RE ALL BEHIND HIM.. BUT WAY BEHIND!

WE CAN do our part here at home and do it up to the hilt—but who could compare our safe and not too uncomfortable part with that of the boy with the gun?

It's OK to talk about turning out the guns and the tanks and the munitions for him, and keeping him supplied. He needs every bit of it. But doesn't some of that talk begin to sound too blatantly one-sided? *We're* not called upon to wield those weapons in the very teeth of Death. That's for him.

And it seems to us the cheers ought to be for him too. We've practically given up the manufacture of Registering Equipment for the duration in favor of producing aircraft assemblies and parts for bombers and fighters, and some things we don't talk about. But isn't every manufacturer, every worker, everyone worth his salt doing the same thing?

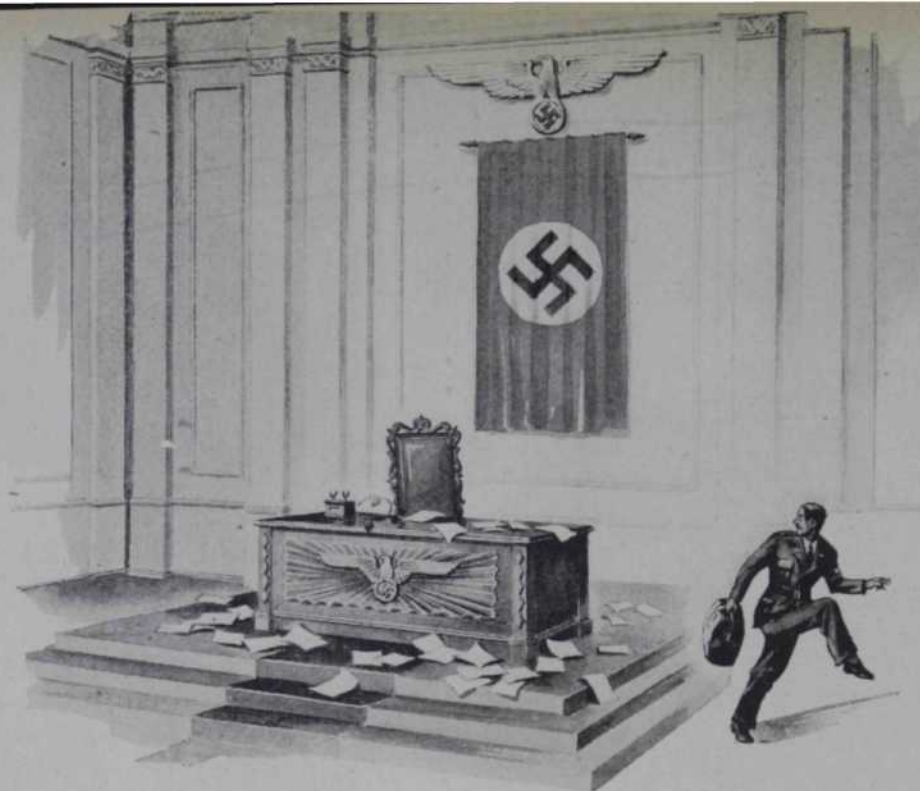
We think that's pretty well expected, these days. We think G.I. Joe deserves the bows.

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DAYTON 1, OHIO

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CASH REGISTERS for every type of retail store
FARE REGISTERS and TAXIMETERS for transportation
TOOL CONTROL REGISTER SYSTEMS for industry

MANUFACTURERS OF REGISTERING
EQUIPMENT SINCE 1898



When Hitler steps down will your Credit Losses step up?

HITLER'S exit will be the best news in a lifetime . . . but for some, bad news will follow Germany's surrender.

Many companies whose credit seemed beyond question may suddenly find themselves unable to pay what they owe. And right there is a demonstration of why your business needs American Credit Insurance *now . . . to protect you against sudden changes which can affect your customers' ability to pay after shipments are made.*

American Credit Insurance *guarantees* payment of your accounts receivable. It guarantees, *for the uncertain future*, that abnormal and unpredictable credit losses will not impair your working capital . . . or your credit . . . or your profits. In short, it gives you certainty in place of uncertainty.

Your credit manager investigates, appraises and controls credits on all accounts as usual. American Credit Insurance supplements his work and fortifies his judgment . . . by protecting you against credit losses caused by developments after (or undiscovered before) goods are shipped.

Manufacturers and jobbers in over 150 lines of business carry American Credit Insurance. You need it too. For further information, write for our booklet, "The A-B-C of Credit Insurance." Address: Dept. 41, American Credit Indemnity Co. of N.Y., First National Bank Building, Baltimore-2, Md.

J. T. Fadden
President

American Credit Insurance

*Pays You When
Your Customers Can't*



OFFICES IN PRINCIPAL CITIES OF UNITED STATES AND CANADA

compete with others in the world market.

"The labor cost is greater than in any other major crop."

If the new tools—"I am told the International Harvester Company has a mechanical cotton picker that works satisfactorily; others will come along"—will permit the American farmer to produce cotton on competitive terms with foreign growers, then all will be well. If the American farmer cannot compete with the world it may be necessary to divide the crop into two parts. One for home consumption and the other for export. There might be a subsidy on the share used at home. If other crops were substituted for cotton there would be wide dislocation in agriculture.

Fast at Shorthand

COTTON was king when William Clayton was born in Tupelo, Miss., February 7, 1880. His father had been a cotton farmer. Possibly not an altogether successful one, because when the boy was six years old the family moved to Jackson, Miss., and he became a railroad contractor. When the tall, skinny boy was 13 he quit school. He had taught himself stenography at night and needed a job. There were others in Jackson who could write shorthand, but Will Clayton was the fastest and the most accurate the town had ever known.

He began to do work for lawyers and traveling men and his modest fame began to spread. At 14 he was the deputy clerk of court. At 15 he was the court reporter. Jerome Hill, head of a prosperous cotton factoring business in St. Louis, came to Jackson on some matter in litigation, and liked his work.

"I have a job for you in St. Louis," said Hill.

"I'll ask my mother," said Will Clayton.

At 16 Hill took him to New York as his secretary. Five cotton ginning companies were considering a merger, which later became the American Cotton Company. Clayton did two things which were remarkable in a 16 year old boy. He bought a map of New York, and walked about the city in every spare hour until he knew it and its history better than the born New Yorkers. He went to live in a French boarding house to study the language.

"The cotton business," he said to some one, "is a world business."

He came down with pneumonia, went home to Jackson to recuperate, decided to become a lawyer, and after a year was called back to New York to be the assistant treasurer and assistant general manager of the American Cotton Company. He fell in love with and married Miss Vaughn, and decided to strike out for himself.

There were troublous times ahead. Cotton was still king, but conditions in the production area were not satisfactory. The New York Cotton Exchange dominated the business.

With his two brothers-in-law and a capital of \$9,000 William Clayton set up

(Continued on page 50)



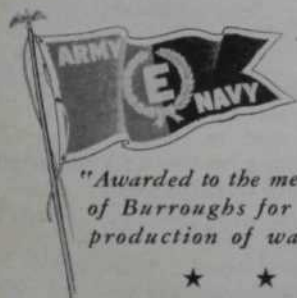
Billion-Dollar Payday

Uncle Sam's billion-dollar payday calls for global strategy. For over ten million men must be paid . . . *on the spot*, which might be Alaska or Australia, Iceland or India, South America or China . . . *in cash they can spend*, which means dollars and dinari, pounds and pesos, rupees and rubles.

Each man's pay is a complicated calculation that considers rank . . . allowance for subsistence . . . allotments for dependents . . . extra pay for specialist's ratings, overseas service, distinguished service awards and qualification in the use of arms . . . deductions for insurance premiums, War Bonds and special items.

Plainly, Uncle Sam's billion-dollar payday involves one of the greatest figuring and record-keeping jobs of all time, impossible to perform without accounting machines. In the armed services and in government offices, thousands of fast, accurate Burroughs adding, calculating and accounting machines are playing an outstanding part in this war work so vital to our fighters and to their families at home.

BURROUGHS ADDING MACHINE CO. • DETROIT 32, MICH.



Years of experience in precision manufacturing are enabling Burroughs to produce and deliver the famous Norden bombsight—one of the most precise instruments used in modern warfare.

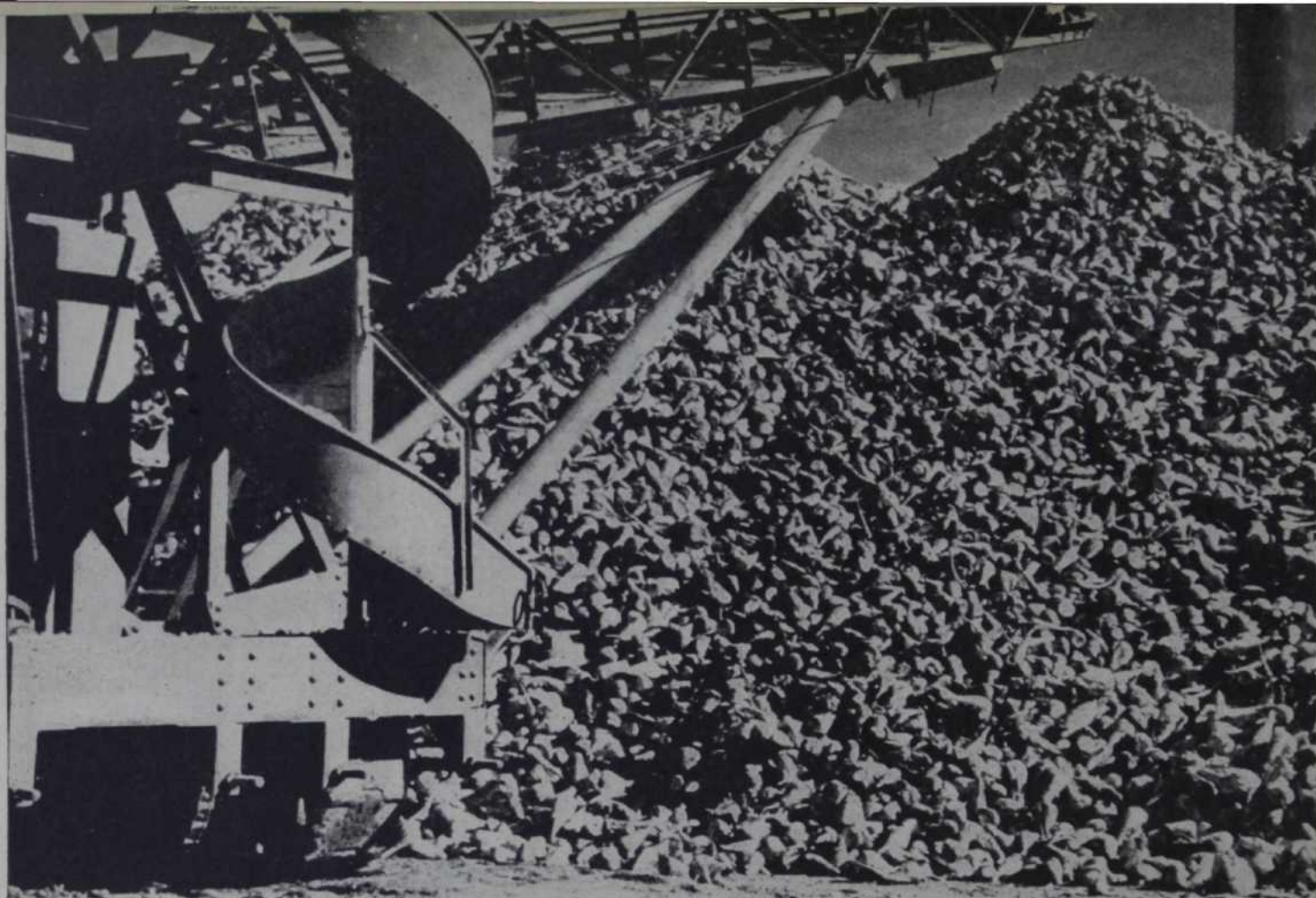
New figuring and accounting machines are also being produced by Burroughs for the Army, Navy, U. S. Government and other enterprises whose needs are approved by the War Production Board.

LET'S ALL BACK THE ATTACK!
★ BUY MORE WAR BONDS ★

Burroughs

FIGURING, ACCOUNTING AND STATISTICAL MACHINES • NATIONWIDE MAINTENANCE SERVICE • BUSINESS MACHINE SUPPLIES

NATION'S BUSINESS for May, 1944



EWING GALLOWAY

Machines among the sugar beets smooth out the labor peaks and reduce costs

Profits from Adversity

By ARTHUR HAWTHORNE CARHART

COSTLY hand operations may have tough going in the keen competition of postwar years. Therefore much of industry, more of agriculture, may observe with profit the revolution in sugar beet production.

In the past, sugar beet production has required a large amount of hand labor. Now this industry is on the way to a full mechanization.

Beet sugar production was pioneered in America about 100 years ago. In 1942-'43 its production was 32,327,342 hundred-pound bags—about 30 per cent of the sugar used in this country. This year 1,000,000 acres will be devoted to sugar beets. This is $\frac{3}{10}$ of one per cent of our cultivated fields.

When the mechanical revolution of sugar beet production becomes fully effective, a high type, well paid American farmer, operating ingenious machines, will produce as much sugar in the bag as five to a dozen lower paid laborers formerly did. Step by step,

A HAND-OPERATED industry in a mechanized America had rough going but it is finding an answer which may have lessons for others

from seed preparation to stock pile, machines are taking over. Before this became possible, many technical problems had to be solved.

Beets produce compound seed balls, several seeds bunched in each cluster. One of the greatest peaks of hand labor in growing beets, has been the thinning and blocking required to get a proper spacing between plants. A single seed cluster delivered into the ground by a planting machine, would sprout several plants. Laborers, working on their knees, thinned out excess plants, leaving one to mature. That has been back-breaking, costly, but necessary, labor.

The best spacing between individual beets in the row, varies in different

areas because of cultural factors, but the average optimum spacing approximates one foot. That is what the kneeling worker was supposed to secure as he crept along a row, thinning clusters of little plants to singles, and chopping out the intervening plants.

Science first tried to develop a one-seed strain of beets. Throw-back plants persisted in producing a high percentage of clustered seeds. Then the machine stepped in. A grinding wheel, turning against a fixed knife, breaks clustered seed into one-seed units. The seed then is sorted and cleaned. This "segmented" seed costs twice as much per pound as unmilled seed, but assures single seeds and single plants.

Just that one move has reduced hand thinning labor 30 to 35 per cent. Although segmented seed costs twice as much per pound as old type seed, it contains twice as many potential plants. Old seed was only 35 to 40 per cent fer-



DOWN in America's Southland there is a special kind of "Victory Garden" . . . planted by Mother Nature a million years ago.

Today, this productive "garden" is yielding a bumper crop . . . coal, ore, minerals and raw materials of every kind . . . to make arms, ammunition and equipment for America's fighting men.

Tomorrow, when the war is won, trainloads of coal will roll from Southern mines . . . over the Southern Railway . . . to feed fuel-hungry furnaces in post-war factories. Rich iron ore will come out of the earth . . . and speed by rail to roaring steel mills in the South.

Bauxite, clay, phosphate rock, zinc, limestone, lead

. . . all the mineral resources of this great Southland . . . are destined to make mighty contributions to the brighter America that surely lies ahead.

In war, these vital materials are getting the right of way . . . riding on the "fighting freights" that thunder along the Southern Railway System throughout its length and breadth.

In peace, these "Victory crops," planted by Mother Nature ages ago, will continue to roll on the Southern Railway . . . to meet the growing needs of busy Southern industry. *Look ahead . . . Look South!*

Ernest E. Harris
President

SOUTHERN RAILWAY SYSTEM

The Southern Serves the South

tile. Segmented seed approaches 75 per cent on germination tests. Formerly 16 to 18 pounds of seed were planted per acre to provide for low fertility and thinning. As little as 2½ pounds of segmented seed have given excellent stands. Not only are the seeds higher in germination, more nearly certain to produce single plants, but their more uniform size allows the planters to be set so only one seed is delivered at a time; more insurance of singles.

Better seed prepared

NOT yet in use, but being developed, is the coated seed. It is "wrapped" in a paste that hardens. This increases the size to about that of a sweet pea seed but achieves uniformity. The paste is a combination of disinfectant to prevent disease attacking the little beet plant, and plant food to give it a quick boost in growth.

Just one more fact about the seed: The grindings are about 20 per cent of the original volume, are high in protein, and are sold as top-quality stock feed.

With clustered seed causing non-uniform spacing of plants, any mechanical thinning was impossible. No machine could reach into a cluster of little plants and thin to one. Now, if uniform planting deposits four seeds to a foot of row, by straight mathematics, it is possible to figure out a scheme to remove a percentage of small plants, leaving an average of one beet per running foot. That goal has been secured.

Two types of thinners are being used. One is an ordinary cultivator, fitted with knives, properly spaced, which crosses the rows at right angles, cultivating and thinning at the same time. The other machine travels along the row, thinning with a set of rotating knives.

The kneeling man, cramped and weary at thinning time, is fading from

the beet fields. Over nine years of testing, the average time required to hand thin and block an acre of beets has been 23.34 man-hours. A machine performing the same operation requires only 0.45 man-hours per acre.

It would be expected that hand thinning would come closer to producing 100 per cent stand of one plant per running foot of row, than any mechanical means. But workers tire, their thoughts stray, and by actual test, the unthinking, precision-set machine, combined with uniformity of seeds, produces slightly better uniformity of stand than did hand thinning and blocking!

Another labor peak in beet fields comes at harvest time. Formerly, a plow lifted the beets from the soil, and in its wake trudged men with hooked knives. They stuck a beet with a knife, lifted it, removed it from the knife point with the left hand, held it, chopped off the leafy top and tossed the beet to a pile. Six motions.

Then men with long tined forks, lifted the beets, about twenty-five pounds at a time, to the loading wagons. This required men with sinew.

Now machines perform all these operations. One type digs the beets with plows, hustles them on a belt conveyor, runs them through a "wringer" device to scrub off adhering clods, lops off the leafy tops, and delivers them into a bin attached to the harvester and holding a third of a ton. A truck drives up beside the harvester, and without either machine or truck stopping, the beets are dumped into the truck. Running to a beet dump, the truck tips, the beets fall into a bin and a conveyor carries the load into a flat car.

At the factory storage pile, conveyor-elevators stack the beets in great mounds. A fast traveling loop of trucks hurries to a field being harvested, hurries out after loading; only a number

of trucks and fast travel can keep abreast of that machine digging, cleaning, topping and loading beets all in a continuous motion.

The second type of harvester pulls the beets instead of plowing them out. It is efficient in open soils. A knife-like blade first loosens the beets, but does not lift them. Behind this is a wide-rimmed wheel, fitted with spikes that jab into the tops of beets. The wheel revolves, they are lifted to a given point, knives cut the beet away, and it falls on a belt conveyor, while the top is brushed off the spikes as they move on into another turn to pick up more beets.

The old method of plowing out the beets, hand topping and hand loading required an average of 40.35 man-hours per acre. The wholly mechanized operation requires but 8.9 man-hours. Hard to believe, but still resting on the fact that a good machine, well designed, adjusted and operated is better than low-cost labor that tires or doesn't care about perfection, the mechanical topping is slightly better throughout than the man with knife in hand.

Labor peaks flattened out

THERE has been some use of machines in the past; plows, seeders and cultivators always were used. But new machines, for specialized beet operations are the new trend; not only those cited but others as well. Mechanical thinning and harvesting have flattened out the two high peaks where hand labor was required.

Where does the American sugar beet and the product now stand?

Under old methods, it took six to seven man-hours to produce one 100 pound sack of beet sugar. It takes approximately ten hours of labor in foreign fields to produce that amount, but at the lesser wage cost. Fully mechanized beet operations have proved that 100 pounds of beet sugar can be produced with from four to five man-hours, as mechanical operations now stand. It may drop as low as two man-hours per 100 pound sack of sugar as higher efficiency and refinements are incorporated in the machines.

Records show the 119.02 man-hours required per acre under old methods, have been cut to 47.45 man-hours by mechanization. But investment, maintenance and operation costs in machines rise as hand labor is replaced. Groups of neighbors are pooling their funds to buy the machines; it spreads first costs so all can mechanize their operations where one might be halted by first costs. The speed at which the machines operate when compared to hand methods, allows several growers to harvest all their crops in the same time formerly required. That line of action is solving that particular problem.

But how much net saving results if they do this? If the cost in machines goes up, although hand labor goes down, is there any net saving? Here is the answer, based on field records, not on an experimental basis.

(Continued on page 61)



EWING GALLOWAY

When machines harvest beets, many hours of hard labor are saved.

The men operate tractors and trucks instead of forks and knives



LIKE TO RIDE ON A TRAIN LIKE THIS?

IT'S a day coach. Looks pretty nice, doesn't it? And it is nice! Light, bright, roomy and comfortably air-conditioned. Smooth riding at high speeds with pillow-soft seats that fairly invite you to sink down and relax—wide windows that provide a sweeping view of the scenic landscape—and dozens of important little travel conveniences. • Where will you find such coaches as this? Many of them were built before the war began and are now in use. Hundreds more had been planned but never built—you know the reason why. • We haven't

been able to use scarce materials and man power to build trains as we'd like to have them. There's a war to win and we're doing our level best to meet the nation's wartime transportation needs. • But we offer this little glimpse of the future because we want you to know, when you ride on our trains today, that railroads are looking ahead, planning for better trains for tomorrow.

**ASSOCIATION OF
AMERICAN RAILROADS**
ALL UNITED FOR VICTORY

Trade Groups Do a War Job

By W. J. ENRIGHT

ON A HOT Wednesday afternoon in July, 1942, the telephone rang in the offices of the American Iron and Steel Institute. On the wire was an executive of the War Production Board in Washington.

"We're holding a meeting here a week from Saturday," the WPB man said. "We would like to have your alloy steel committee present a new series of alloy steels which can be made entirely from scrap and can replace steels now being used without any change in design of the parts."

The institute man immediately phoned top-flight metallurgists in five prominent alloy steel producing companies, outlined the problem and passed along to them certain technical information, which the WPB had provided. The necessary research work was parcelled among the five metallurgists to avoid duplication of effort. Each mobilized his staff for day and night work.

On the Saturday of the WPB meeting, the five metallurgists and the man from the Iron and Steel Institute who had been coordinating the work met at breakfast in Washington. There the results of their efforts were consolidated into a report which a few hours later was presented to WPB. Within a few weeks, the new steels, thoroughly tested, had been officially approved for war use and were in full commercial production.

This is one of myriad examples of the war work which the country's thousands

the committee are Henry E. Aldrich, Irene L. Blunt, Vanderveer Custis, Henry P. Fowler, Frederic R. Gamble, George P. Lamb, Claudius T. Murchison, George W. Romney, Harry R. Tosdal and Theodore E. Veltfort.

Based on replies from 72 associations in the manufacturing field, 24 in distribution, 16 in service and 16 others for a total of 128, the report is intended primarily for members of ATAE and is thorough and detailed.

Some of the leading associations through the pressure of work were unable to answer. Others, because of the necessary secrecy of their efforts in the war program, could not do so. It is likely that the war must end before associations are given thorough and full credit for their efforts.

The ATAE report, however, demonstrates that the associations have been tied in with practically every phase of the war program from surveying raw materials, to selling war bonds, digging out statistics on manpower and developing new products for the Army and Navy.

They have cooperated with every agency involved in the war effort, including the War Production Board, Office of Price Information, War Manpower Commission, Office of Defense Transportation, Food Distribution Administration, War Labor Board, War Food Administration, Office of War Information, Reconstruction Finance Corporation and all the others.

Here are a few of the liaison activities of associations with WPB alone:

1. Dissemination and explanation of WPB regulations to industry.
2. Establishment of councils for war production.
3. Providing assistance in procurement and development of new sources of materials.
4. Recommendation of simplified procedure in administrative and productive operations.

5. Information as to how use of industry's product will aid war program, shorten processing time.

These activities are exactly one-third of those listed in the survey. An equal number of statistical contributions are listed, including:

OUT OF THEIR war experience, trade associations have developed new and better methods—and because of what they have learned, expect to be of greater service in the postwar period

1. Provision of complete statistical service giving a picture of production, consumption, distribution and trends.

2. Checking questionnaire and report forms which the Government expects to issue.

3. Surveys of military demand for products.

4. Location of idle equipment and plants.

5. Surveys of labor supplies, wages, manpower productivity and labor bottlenecks.

The associations have also cooperated with WPB in conserving, standardizing and developing substitute materials. Some of them started converting to war long before this country actually joined the hostilities.

The Institute of Carpet Manufacturers of America, for instance, surveyed the industry to find out what mills could do best in the event of war, almost a year before Pearl Harbor. The Institute urged its members to start converting some looms for experimental purposes and to obtain trial orders from the armed services.

Later, the institute's technical committee and a production committee arranged for technicians and production men to visit each other's plants, which were converting to duck, duck fabricated items and blankets. When these items were actually needed, a large part of the conversion had already taken place and the carpet industry was able to meet all requirements.

In the past two years, the industry has produced millions of yards of heavy duck, and several millions of woolen blankets, tarpaulins, truck covers, etc. In addition, their machine shops were greatly enlarged and turned out munitions as well as parachutes, flame throwers, camouflage cloth.

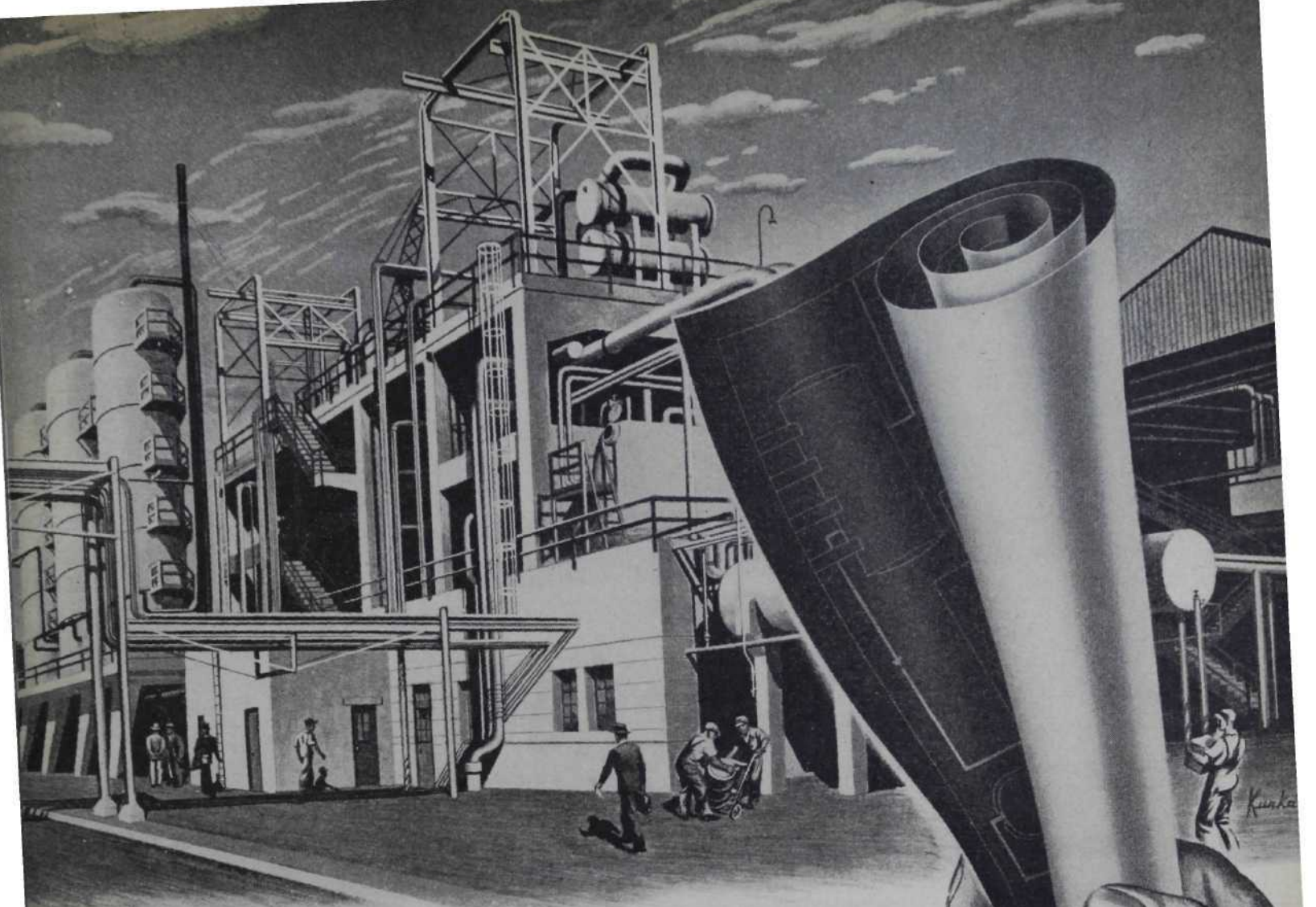
Although much of the associations' work for the Army and Navy is highly confidential, the report does give general classifications, such as:

(Continued on page 65)

AMERICA'S trade associations have tied in with practically every phase of the war program from surveying raw materials, to selling war bonds, digging out statistics on manpower and developing new products for the use of the Army and Navy

of trade associations have been quietly doing. That work has been summed up in a report recently compiled by the American Trade Association Executives.

The report was prepared by a Special Committee on Trade Association Participation in the War Program, headed by Merrill A. Watson, vice president of the Tanners' Council. Other members of



FROM *FLOW SHEET* TO *PERFORMANCE*

In the chemical and process industries, Blaw-Knox offers a unique two-fold service. On the one hand, it can provide complete operating units designed, engineered and carried through to operation . . . all under one responsibility. On the other, Blaw-Knox fabricates an almost unlimited variety of equipment for: distillation, gas absorption, solvent extraction and recovery, heat transfer, evaporation, crystallization, drying, kilning and calcining, organic synthesis, mixing and

stirring, dry blending, high pressure processing, vacuum processing, impregnating, gas cleaning and conditioning, deodorization, etc.

Blaw-Knox's position in these fields is derived not only from its many years of experience and its broad engineering and plant facilities, but from its thorough knowledge of the most advanced and approved methods.

A discussion with regard to your present and future plans is invited.

BLAW-KNOX

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2053 FARMERS BANK BLDG.,
PITTSBURGH, PA.

Buy More War Bonds and Stamps

A PACEMAKER FOR
AMERICAN INITIATIVE
AND INGENUITY

LEWIS FOUNDRY & MACHINE DIVISION,
Rolls and Rolling Mill Machinery

POWER PIPING DIVISION, Prefabricated Piping Systems

NATIONAL ALLOY STEEL DIVISION,
Heat and Corrosion-Resistant Alloy Castings

PITTSBURGH ROLLS DIVISION,
Rolls for Steel and Non-Ferrous Rolling Mills

BLAW-KNOX DIVISION, Chemical & Process Plants &
Equipment, Construction Equipment, Steel Plant Equipment,
Radio & Transmission Tower . . . General Industrial Products

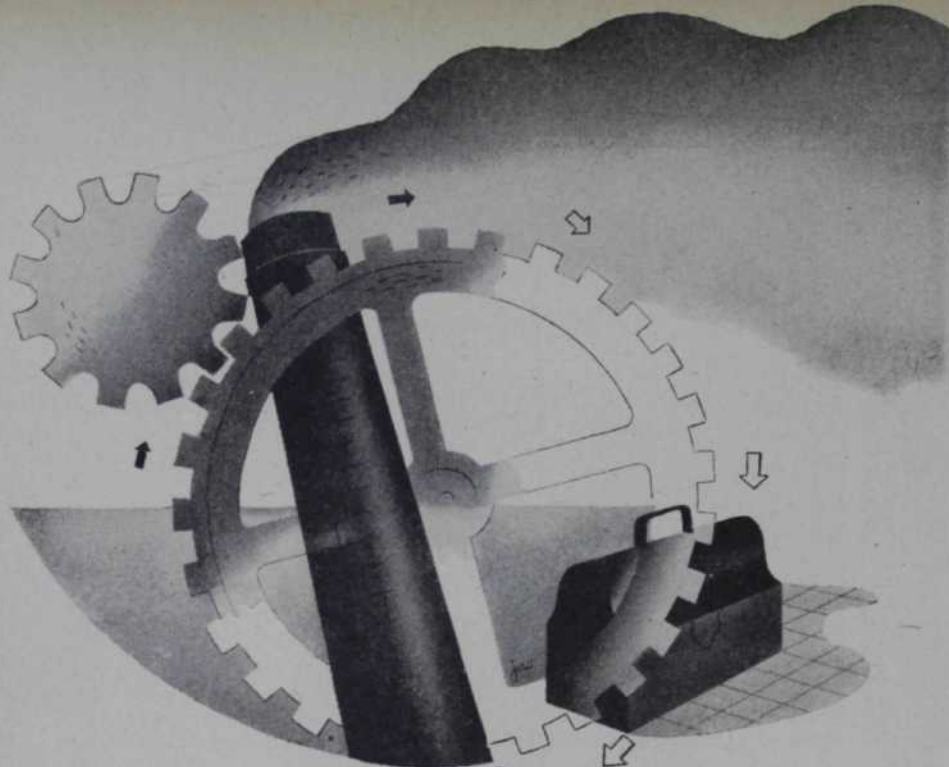
COLUMBUS DIVISION, Ordnance Matériel

UNION STEEL CASTINGS DIVISION,
Steel and Alloy Castings

MARTINS FERRY DIVISION,
Bofors Anti-Aircraft Gun Mounts

BLAW-KNOX SPRINKLER DIVISION,
Automatic Sprinklers and Deluge Systems

Four Blaw-Knox Plants have been awarded the Army-Navy "E" for war-production excellence
A FEW VICTORY PRODUCTS



faster
production

to save lives today...save jobs tomorrow

Time saved in our war plants today marks the difference between life and death... hastens the day of victory and peace.

After the war, time saved still will be vitally important. For in postwar days production costs must be kept low to promote consumption—to provide jobs for all.

Here at Acme our staff of consulting engineers can help with your production problems—both today and after the war. You may need new dies...new patterns...heat-treated aluminum castings. You may need special tools which Acme can design and build. Ask for the recommendations of Acme engineers.

Send for new book. Acme's modern facilities for complete service to metal-working plants are profusely illustrated in our comprehensive new book, "Acme for Action." Sent upon request to interested executives.

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HEAT-TREATED ALUMINUM CASTINGS... PATTERNS... TOOLS
TOOL DESIGNING... PRODUCTION PROCESSING

FOR VICTORY
BUY
WAR BONDS
AND STAMPS



Women's Land Army

NEEDS for farm workers
this year are going to be
greater than last. . . .

FOUR million workers will be needed this year to supplement the efforts of the regular farm labor force which now numbers about 8,000,000 persons—farmers, farm family members and year-round hired workers.

Of the total additional workers needed, 800,000 will have to come from urban and suburban women over 18.

The 1944 farmer's food production goals have been set about five per cent higher than in 1943. Thus the increased call for volunteers put forth by Miss Florence Hall, of the U. S. Department of Agriculture, who heads the Women's Land Army.

Women—particularly that group of 5,000,000 non-working women between 19 and 55 without children—are expected to provide a good portion of the emergency harvest hands this year.

Any woman, regardless of age, who is in position to work three to five months (or more) on a farm is advised to write to the State Women's Land Army supervisor, whose address is usually at the state agricultural college, and ask if training programs are available.

Women who are not in position to give much time to farm work but would still like to help out for a few days now and then may get in touch with their local farm placement bureaus.

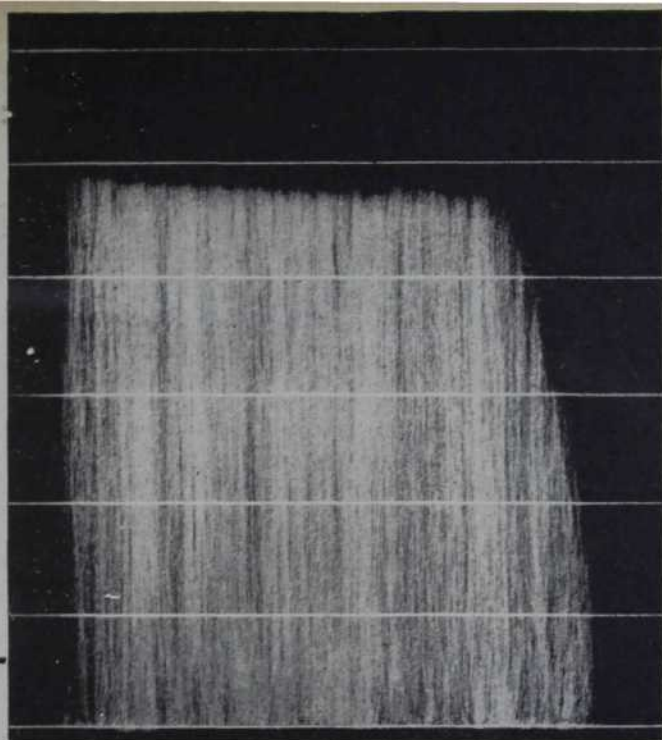
The 48 state extension services have set up 6,150 placement offices scattered throughout the 3,000 farming counties.

The seasonal and part-time women workers of last year contributed much valuable aid; and the work they did has brought varied comments:

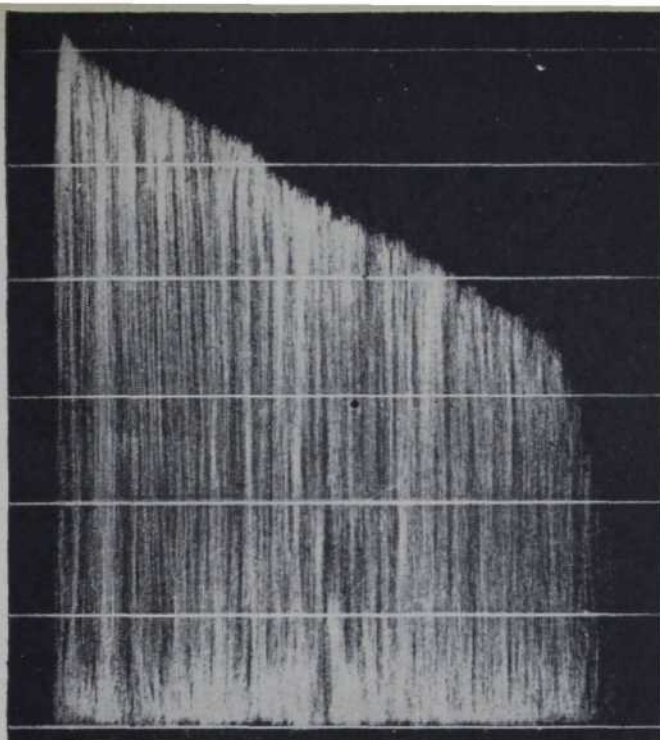
A banker's wife said: "Work on a farm has afforded me the most unique, educational, and thoroughly worth-while summer I have ever had."

A teacher remarked: "It wasn't as hard work as I thought it would be, even though each type of work has its own peculiar ache."

While one college girl who had worked on a dairy farm confessed: "Every time I see a bottle of milk, I am awed. I never had any idea so much had to be done for a bottle to land at my doorstep."



This is the way a sample of standard rayon staple looks, with fibers combed out and laid parallel. Notice the nearly perfect uniformity of length, desirable in most uses.



Here is a sample of the new "varied length" rayon staple showing distribution of long and short fibers. The new process permits control to fit the varied lengths typical of wool.

The long and the short of a new Rayon development

YOU WOULD EXPECT the normal result of a technological improvement to be controlled uniformity. But here is a case where the direct opposite, controlled *non-uniformity*, was the aim of American Viscose Corporation research. And why? The answer lies in the new rayon-and-wool blended fabrics now appearing on the market.

Rayon is particularly adapted to blending with wool to create fabrics with many distinct advantages. However, to combine it with wool... *uneven* (or varied) lengths of rayon staple fibers are desirable so that they will more thoroughly blend with the *uneven* lengths of natural wool fibers.

Sounds simple doesn't it? But the solution had to provide a fast, practical and low-cost means of achieving this *controlled non-uniformity*... in pound after pound of precision-made rayon staple, each pound containing more than five million fibers!

First, a special process to achieve this had to be developed in American Viscose Corporation's laboratories. Then, special machinery had to be designed to make the development commercially practicable.

Today a more even and intimate blend of the natural and man-made fibers is assured... additional beauty, better texture are provided in the finished cloth. And furthermore, the process shows some reduction in waste, with a corresponding increase in production efficiency.

You may not be able to notice any startling improvement in rayon-and-wool fabrics as a result of this development. It is just one of the many technical advances in textile manufacture that can be directly traced to the continuous research program of American Viscose Corporation. Taken together, these small improvements add up to better fabrics of higher intrinsic value... designed to satisfy the needs and wants of America's consumers.

AMERICAN VISCOSSE CORPORATION

Producer of CROWN* Rayon Yarns and Staple Fibers

Sales Offices: 350 Fifth Avenue, New York 1; Providence, R. I.; Charlotte, N. C.; Philadelphia, Pa.

Plants at: Marcus Hook, Pa.; Roanoke, Va.; Parkersburg, W. Va.; Lewistown, Pa.; Meadville, Pa.; Nitro, W. Va.; Front Royal, Va.

★ BUY UNITED STATES WAR BONDS AND STAMPS ★

*Reg. U.S. Pat. Off.



*A better way
to buy
Rayon Fabrics*

This identification is awarded only to fabrics containing CROWN rayon, after they have passed the CROWN Tests for serviceability.



PILOT—Talking of miracles... First we land with a shattered rudder. Then, up pops a new one — from across the world!

MECHANIC—Wild ride that new rudder had, too, by boat, truck and plane. But KIMPAK* kept it safe.

This Battle-Tested Packaging Will Protect Your Peacetime Products

War supplies must journey in many ways—on wave-swept barges, trucks careening over shattered roads, bullet-riddled planes, tiny mountain burros. Because KIMPAK Packaging *shock-proofs* more effectively than do many other packaging materials, it is chosen to protect shipments to our fighting forces. It is rugged, pillow-soft, resilient.

Its merit proven in war, KIMPAK will in peacetime carry America's commodities-for-better-living to the corners of creation.

And what a difference this product-protection will make in post-war

shipping! Ten standard types of KIMPAK—each in a variety of thicknesses and each purpose-made for tough assignments—will meet an amazing range of requirements.

Whether your business is teacups or dynamos, this versatile material will reduce your shipping losses, save packing-room space, cut packaging time and transportation costs.

NOW is the time to consult with our engineers about your post-war packaging problems. Telephone, write or wire for the KIMPAK representative. Address: Kimberly-Clark Corporation, Neenah, Wisconsin.

*KIMPAK (trade-mark) means Kimberly-Clark Wadding

Kimpak
REG. U.S. PAT. OFF. & FOREIGN COUNTRIES
CREPED WADDING

A PRODUCT OF
**Kimberly
Clark**
RESEARCH

Sales Manager for Uncle Sam's Surplus

(Continued from page 40)

the firm of Anderson and Clayton in Oklahoma City.

"The firm grew rapidly" is his comment. In fact, he knew the cotton business as perhaps no other man did at that time. In the years that followed the firm built gins and seed mills. Traveling gins were sent out to regions that were difficult of access. He first rented and then built warehouses and taught new methods of growing to the planters.

All the time his resentment against the New York Cotton Exchange was growing. The fight against that organization began in 1900 and ended in 1926 with victory for the rebels. To bring the Cotton Exchange around to his view he squeezed the squeezers. Perhaps he did not speculate, but he knew so much more about cotton that he beat them at their own game. "Cotton Ed" Smith said during the investigation into this operation that:

"I never heard anything I liked so much."

Clayton is quoted as saying:

"I made so much money that I was ashamed of myself."

Supply and demand rules

THE World War had helped, because the Europeans were unable to handle all the business offered them. By the middle 1920's the Anderson and Clayton firm was the biggest cotton factor in the world. He was quoted during one of the four investigations as saying that they made most of their profits through bucking the Herbert Hoover cotton policy, to which he was as much opposed as he has been to the New Deal's crop restrictions.

He holds that in a world market the law of supply and demand must be served, as firmly as he did when he first put that conviction to the test. According to Frank Kent, Clayton's appointment as Surplus Property Administrator "is causing considerable pain among the faithful, including some of the more vociferous of the labor lobbyists and some of the more advanced thinkers among the New York radicals."

The complaint is that "he is a rich man, that he is not a New Dealer, that he is not for the fourth term." No consideration is given the fact that competent observers assert that "he is the best equipped man for this particular and highly important job in the whole United States, and that he is a man of the highest probity whose one idea will be to do the job well."

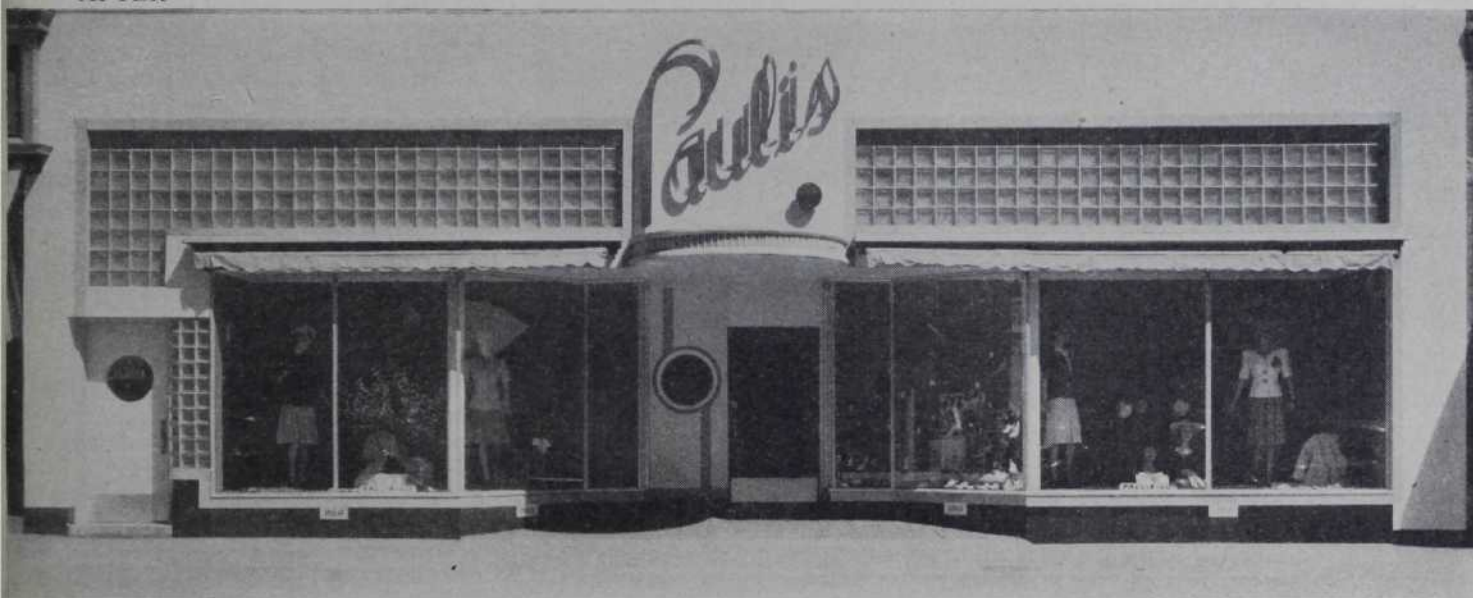
Mr. Clayton thinks that the army and navy goods overseas can at least in great part be disposed of on the ground.

"There is in the world at least \$15,000,000,000 of gold not owned by the United States, not to speak of substantial dollar balances now held by foreigners."

The selling will probably have to be
(Continued on page 52)



AFTER



**A better-looking store
-inside and out-
means a better-paying business!**

**Start planning NOW—so yours will be one of the first stores
modernized when building restrictions are lifted**

A STORE interior made smart and modern with Pittsburgh Glass—and an eye-catching Pittsburgh front—that's the combination which will attract new customers, build sales volume, widen your trading area, boost profits. Thousands of merchants have proved this beyond question.

That's why a large backlog of store modernization work has been

built up during this period of restricted construction. Merchants will be eager to make up for lost time... to bring their stores up-to-date in a hurry, inside and out, so they'll get a head-start on postwar competition.

And that's why you should start planning your new store today. Approve a design for your new store front and interior now. And when we can start modernizing stores with

GET YOUR SHARE OF POSTWAR TRADE with a handsome new store front and interior done in Pittsburgh Glass. The improved appearance of this Watertown, S. D. store shows how Pittsburgh Glass could make your store more attractive to customers. Ursa Louis Freed, architect.

Pittsburgh Glass again... yours will be among the first to get done!

See your architect to assure a well-planned, economical store design. Our experts will gladly cooperate with him.

Don't wait! Send the coupon today for our free book showing actual facts, figures and photographs of many store modernization jobs done with Pittsburgh Glass.

"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH GLASS

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2107-4 Grant Building, Pittsburgh 19, Pa.
Please send me, without obligation, your illustrated
booklet on store modernization.

Name.....

Address.....

City..... State.....



A name plate is a little thing BUT—

A NAME-PLATE is a little thing but its real importance may be far beyond its accepted purpose of identification of the product and its manufacturer.

In its larger sense it is a signature—an implied token and pledge of the integrity of the signer. Every time it is affixed to a machine, a unit of equipment, or other product, an industrial reputation hangs in the balance.

Cleaver-Brooks is constantly alert to this major significance of their name-plate. We do not apply it until we are sure that the machines and equipment, bearing our name, will deliver all, and even more, than

is expected of them in performance and service. Essentially it is a "trade-mark" asking that you think well of us and the products we make.

The steam generators of our manufacture—the special equipment for the armed forces in the field for water distilling, for disinfecting, sterilizing and other hygienic needs—the materials heating equipment for the construction industry—all have a reputation for peak efficiency and performance.

You can be sure that the new products we have perfected for peacetime use, will fully meet the implied "specifications" of the Cleaver-Brooks name-plate.

Cleaver - Brooks

MILWAUKEE 9, WISCONSIN

WISCONSIN

★ CLEAVER-BROOKS PRODUCTS INCLUDE: ★



Steam Generators



Food Processing Equipment



Tank Car Heaters



Oil & Asphalt Heaters



Special Military Equipment

conducted between the United States Government and the governments abroad. Governments that have been completely stripped of money, credit and negotiable goods may be able to obtain the things they desperately need through the United Nations Relief and Rehabilitation Administration.

It may be safely assumed that he will not be flamboyant in his methods.

He will use the established techniques so far as possible. He will try to recover as much value as possible for the Government and do the least harm possible to American trade. He says he will use auctions whenever feasible.

"The chief objection is that auctions are too slow."

Advertising and orderly "market feeding" so as not unduly to disrupt normal trade takes time. He is confident he can judge how much of a given commodity the market can take without too greatly depressing current prices. He sees no harm in slight depressions but he wants no crashes.

So long as a general shortage of such items as machine tools exists he thinks the WPB's methods of allocation will work out satisfactorily. Commodities sold under allocations would be sold at ceiling prices.

As rapidly as government contracts are cancelled he plans prompt disposal of such surplus property as the Government may acquire. There will be exceptions to the rule in plants which present long-range problems.

"Many of the plants not convertible to peacetime production may be required for storage."

Perhaps his nearest friend in Washington is that other Houstonian, Chairman Jesse Jones of the Reconstruction Finance Corporation. Clayton has been the Chairman's right hand in working out the enormously intricate problems of that immensely complicated corporation. The two men have one thing in common.

They are incredibly calm.



"Now get this straight, officer. I was a blonde six months ago, but I'm too busy now!"



"Must have heard he qualifies for a new Comptometer!"

To get down to earth about the matter, new Comptometers are not quite as out-of-this-world as you might have thought. Comptometers *can* be bought. And maybe by you!

It's true, of course, that most of our production goes marching off to make figure-work easier for the armed forces, essential industries and our Allies.

But your firm may possibly qualify for the list of "eligibles," too. Quick and fair decisions are being made on applications by the War Production Board.

If you think *you* qualify, call your local Comptometer Co. agent. He may be able to help you fill out your requisition. If you think you don't qualify . . . but nevertheless are bogged

down with bookkeeping details . . . call him anyway! Perhaps he can streamline planning so that your present equipment will do a bigger job, better!

The Comptometer, made only by Felt & Tarrant Manufacturing Company, 1712 N. Paulina Street, Chicago 22, Illinois, is sold exclusively by the Comptometer Company.

COMPTOMETER

REG. U. S. PAT. OFF.

ADDING-CALCULATING MACHINES AND METHODS

Learning by Mail in Fox Holes

By JOHN CARLYLE



WAR DEPARTMENT PHOTO

Our soldiers are studying 300 correspondence courses, preparing for peacetime jobs

ations of high schools and colleges in the United States and hundreds of individual institutions have voted that special arrangements shall be made for returning personnel who want academic credit for their experience in the service. To make this effective special tests will be given to measure what a man has learned in the service, and on his request a record will be prepared of the courses studied, service schools attended, and service jobs held by the student. In addition the Institute on request will forward a report and obtain a statement of the amount of academic credit granted.



"THIS," said the army officer, "is a serious story."

Of course, it is. There is nothing humorous in the fact that something like 1,500,000 soldiers are studying the USAFI's lesson books in fox holes and tents and barracks. They plan to make themselves better mechanics and book-keepers and citizens. When the war is over some of them will be able to step into better jobs than they had ever hoped for.

The man who used to be an off-bearer in a brickyard will be qualified to take down a Diesel engine and put it together again. Tiger Flowers, who was once an ace of the colored boxers, will have learned all that can be learned from books about running a chicken ranch.

The interlocutor had giggled weakly when he discovered that a former skating partner of Sonja Henie was studying arithmetic. The temptation to say something about figures had presented itself. It had been resisted. But when he read in the USAFI's book of grammar this sentence:

"(Who, whom) the hell was that?"

He could barely meet the army officer's eye.

The USAFI, pro-

nounced U-soff-y, is the handy condensation of the United States Armed Forces Institute's full title. Nothing like it has ever been worked out in any army.

New enrollments are coming into the USAFI's headquarters at Madison, Wisc., at the rate of 10,000 a month and the daily mail weighs one ton. The students—

"Can obtain instruction in business, scientific, technical, mechanical, industrial, liberal arts and engineering fields. Anything from accounting and aviation to trigonometry and welding."

The USAFI is operated by the Army in cooperation with the Navy. It offers a complete academic study program in high school, technical, and college subjects. This consists of four major divisions: Institute Correspondence Courses;

University Extension Courses; Self-Teaching Courses; and Off-Duty Classes. More than 300 high school and technical subjects may be taken direct from the Institute and hundreds of high school, college and technical courses may be taken from any of the 83 outstanding colleges and universities which are cooperating.

All the major associ-

Lesson service speeded up

BRANCHES of the Institute have been established in Hawaii, Alaska, England, Australia and Egypt. At these branches all educational materials can be obtained, lessons graded, etc., and plans are under way to establish other similar branches to provide more efficient lesson service for students serving in adjacent theaters of war. A man who wishes to complete his college course may enroll in the university or college of his choice and the government will meet one half of his text and tuition fees up to \$20. Enlisted men are not eligible for enrollment until they have completed their basic training, the theory being that during the first four months the man has neither the time nor energy to give to study. Also he might be washed out entirely, in which case he is barred. When the candidate has been enrolled he will select his course, obtain the approval of his commanding officer, and send \$2 to the USAFI. For the \$2 he is entitled to take as many courses as he wishes, if his work is satisfactory.

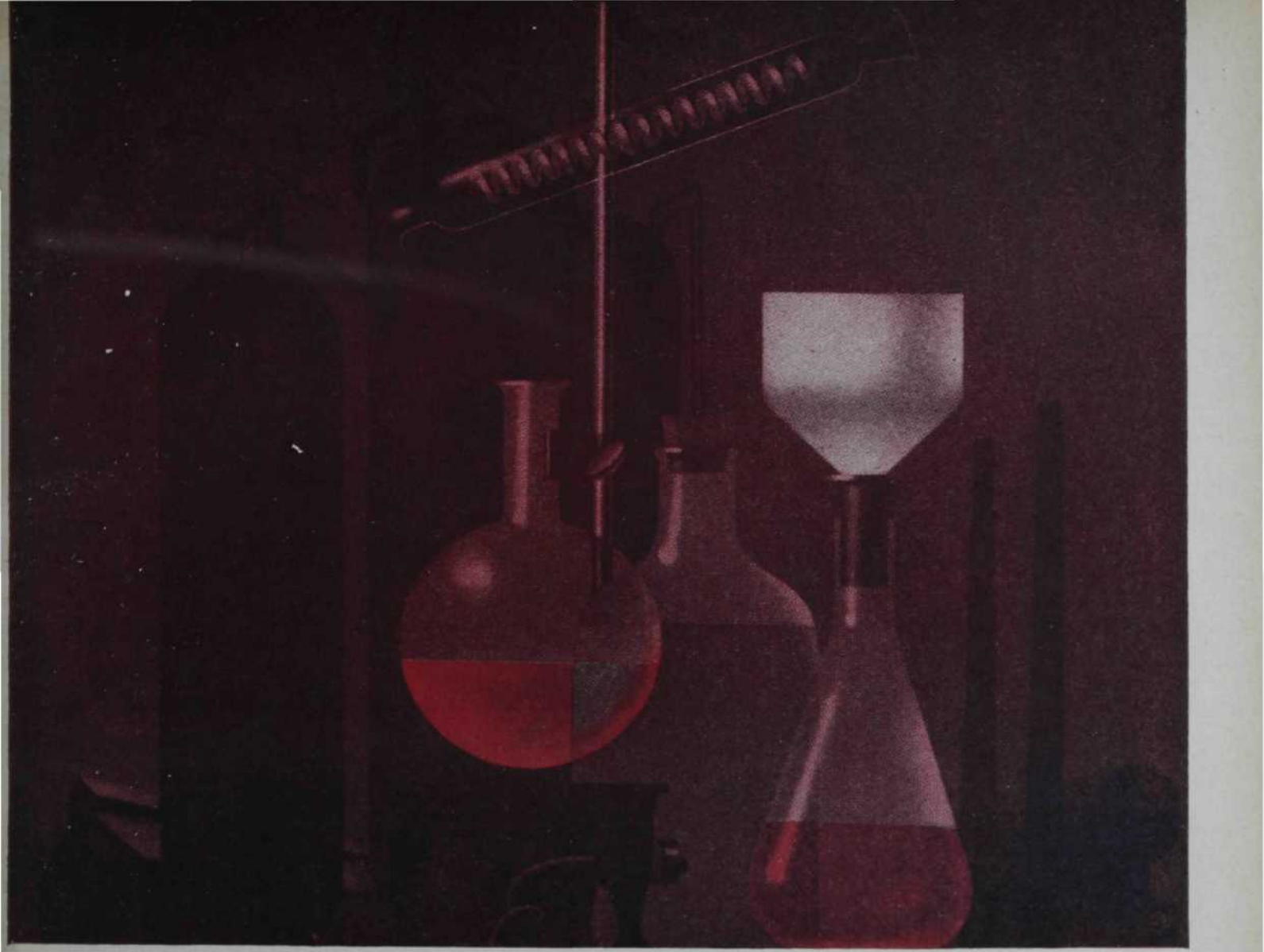
The results?

"I want to be a sheriff," one man wrote. "That's why I am taking the course in criminology."

A Navajo Indian is determined to become an X-ray technician.

Another man: "I was master of no





STAINLESS STEEL...METAL *Par-excellence* FOR THE PROCESS INDUSTRY

MERITS OF ALLEGHENY METAL

- ★ Highly corrosion and heat-resistant
- ★ Easy to form and weld
- ★ Easy to clean and keep clean
- ★ Requires little maintenance
- ★ Low depreciation

THERE are a lot of new faces along the street—high-octane gas, synthetic rubber, magnesium, dehydrated foods, war chemicals and explosives, just to name a few.

But Allegheny Metal kept pace—with new grades, new techniques to meet the requirements for processing these products. There was the need for high resistance to chemical attack, and to oxidation at heat—the need for great strength, long life, easy cleaning and freedom from contamination—require-

ments, all of them, that stainless steel answers best.

If—somewhere along the line in the manufacture of food and dairy products, drugs and chemicals, oil and plastics, textiles and paper—your plans would be profited by a steel with Allegheny Metal's special qualifications, let us help you develop them. Allegheny Ludlum Steel Corporation, Brackenridge, Pa.

*Allegheny Metal is also handled and stocked by all
Joseph T. Ryerson & Sons, Inc. warehouses*



ALLEGHENY METAL

The Time-Tested Stainless Steel



REMEMBER THE NAME TODAY FOR THE NEEDS OF TOMORROW

trade. I hope to have one before I leave the army."

A professional boxer spends his time on a Pacific island studying how to run a chicken ranch. One soldier has set his ambition on getting into the Weather Service. Another plans to lecture on health foods. A bassoon player who once was under Toscanini is preparing for a technical job, "if I cannot return to music" after the war. A reindeer herder in Alaska—pay one reindeer a month—wants to learn to speak good English. A professional bicyclist is hard at mechanical engineering because he plans to "build a better bicycle" after the war. An actor will abandon the stage to become a teacher of languages. A machine operator is now an instructor in airplane mechanics and plans to become an aeronautical engineer.

The samples were taken at random from the letter files.

"Industry," said Col. Francis Trow Spaulding, chief of the USAFI, spare, fast, energetic, and one-time dean of education in Harvard, "can be helped to absorb men on actual evidence. We have no knuckle-crackers in our school. The man who passes the examinations devised by Ralph Winfred Tyler, University of Chicago, is good."

Students are serious

PROBABLY such a man was good to begin with. Certainly the USAFI students are in earnest. The statistics of enrollment are unreliable, because of the unavoidable incidents of war, but it is estimated that not more than 15 or 20 per cent drop out. The assumption is that each lesson should be completed in 30 days and a man who is not heard from in that time may be dropped. Those who are usually protest vigorously.

One lost his lesson book in a fox hole on Munda. The hole was full of water, he was being shelled, and several yowling Japs were heading his way. He thought that, under the circumstances, he was entitled to an extension.

An officious sergeant ordered the barracks floor swept, the student had fallen asleep and the book had dropped out of his hand. He had been unable to find it in the trash pile. Another was hard at his studies when the bombardment began. He forgot to put his book in his pocket. The tent was burned down before he got back to it.

A higher proportion stick to their correspondence courses than in civil life.

"Now that all the Japs here are dead ones we can have lights and I'll catch up with my studies. I'll be right in there pitching."

The USAFI really had its inception at Beaune, France, when the First War came to its incon-

clusive end. So far as the Americans were concerned they were through with Europe. Thousands went AWOL in one-man tours of France. Others sat around, bored to death, and looked for anything to relieve the boredom. Some got into trouble. GHQ had the bright idea of starting the school at Beaune and 15,000 enrolled. For various practical reasons it folded up after six months.

When the American army came into being for the Second War the Beaune experiment was recalled. There were four good reasons for establishing the army school:

Many men wished to continue their education.

Others hoped to qualify for better jobs.

It gave new interest to men who might get into trouble through sheer boredom.

Some found a real interest in learning.

The courses were prepared with these objectives in view. Over all, of course, was the Army's knowledge that the students would be better soldiers. The men overseas are especially interested in the language courses. Shirt-pocket-size booklets contain the words and phrases essential to the soldier in a foreign land, the emphasis being shown by the use of capital letters. If our army ever gets to Russia, the Red soldiers will be surprised by the Americans who can greet them—cannot be kept from greeting them—as *ta-Va-reeshch PAHV-luf*, which is Comrade Pavlov in the USSR; or by being polite, when they have pulled a boner, by transforming "excuse me" into *eez-vee-NRR-tee*. The men get the true Russian pronunciation by listening to the phonograph platters:

"To learn to say these phrases so that you will be understood, imitate the sounds exactly as you hear them. You will hear the English first, followed by the Russian; then repeat the Russian out loud, and say it *good and loud*."

The plan works. In eight hours two men learned to talk enough Turkish to get along. Par for a working knowledge of soldier language is ten to 12 hours. In all foreign tongues the passed students can say "please" and "yes" and "no" and "speak slowly" and "where am I?" and "how do I get to the place I want to go?" They can ask for a restaurant or a hotel or something to eat and how far is it and where are the Americans and how much is it worth.

If they are stuck they can always look again at the phrase book and pick out something that seems to fit. It may seem a little absurd to speak of fruit as *FROOK-tih*, but in a little while the most adaptable soldiers on earth will have the situation well in hand.

Two men out shopping



in India successfully beat the price of a rug from 15 rupees to three. A flier forced down in the desert was approached by a body of very unpleasant looking Arabs. They carried guns, their robes were grimy, and they scowled fiercely.

"Salaam Aleikham," said the flier. That appears to be good Arabian for "How's every little thing?" The Arabs asked:

"Where do you want to go?"

It stumped him for a time. Then he pulled out his shirt-pocket book, found the right phrase, remembered the name of the village, said his piece, and the Arabs laughed. It developed that his pronunciation was all right, but he was heading in the wrong direction. If he had persisted he would, it appeared, have been translated into a sun-dried mummy in a little while, the desert having that effect on waterless travelers. That was the Arabian idea of a good joke.

Languages help soldiers

SOME men were lost in Burma and the Chinese soldiers caught them:

"It was the brick wall and quick prayers for us," they told later. "They thought we were Germans attached to the Japanese army. But a few phrases from the good old book put everything all right."

Vinegar Joe Stilwell requires his men to study the Chinese language three hours a week. This is smooth going for them by this time, because the USAFI's expert says the Chinese and Japanese languages are the easiest in the world to learn to speak.

"Just baby talk."

The average soldier can learn the 150 phrases necessary to get along in any language in eight to ten hours. The more advanced courses give the soldier 1,000 to 1,500 words, well pronounced, in 150 to 200 hours.

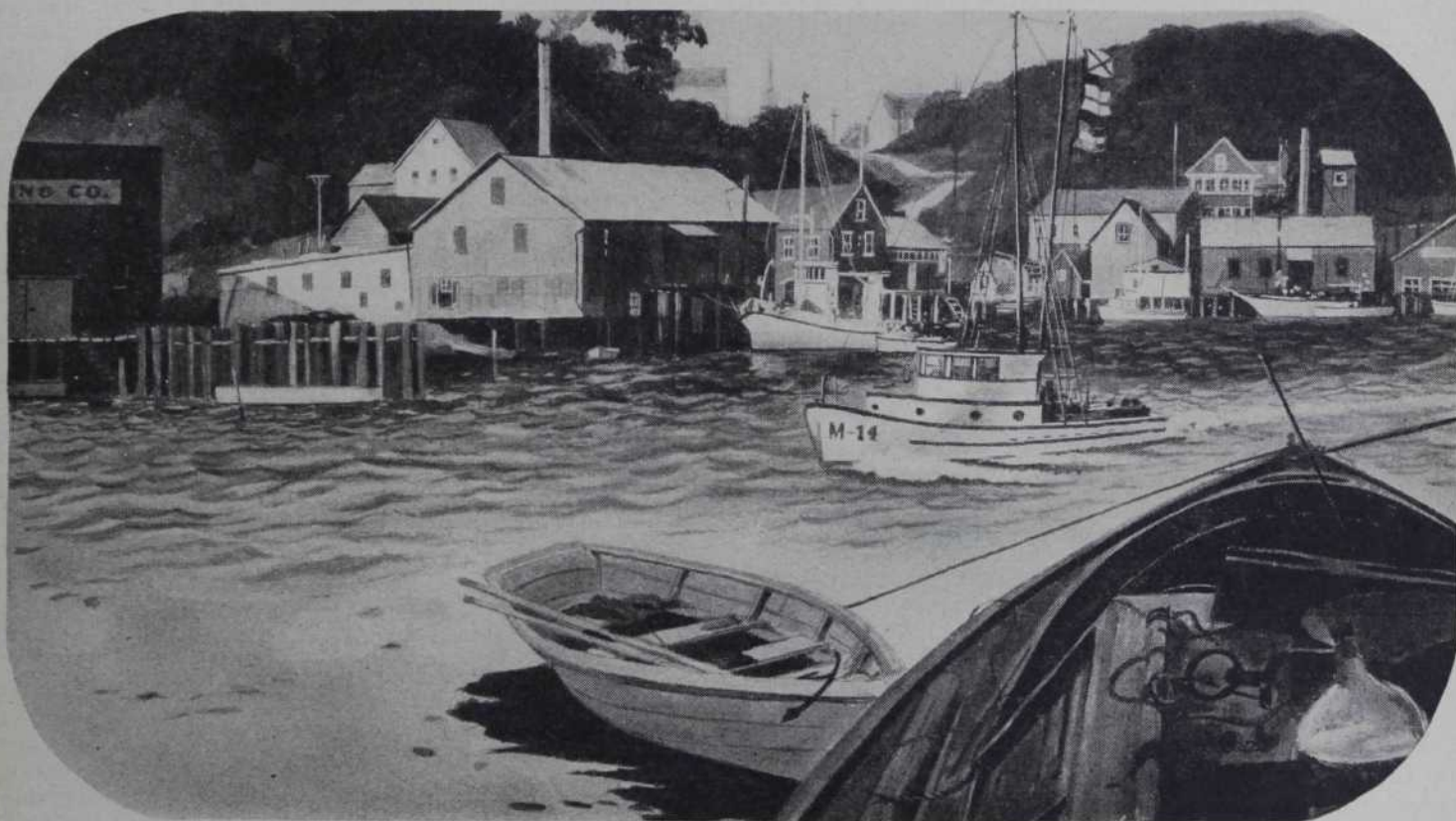
The study of languages seems to be "a shot in the arm" for the G. I. Joe. By the time the lessons on the phonograph platters have been thoroughly learned, the soldier is able to get along with just the written primer to help him.

No attempt is made to teach grammar in the foreign languages. The man talks and points and eventually learns all he needs to know. But for those who are conscious of deficiencies in their own



DOWN EAST

...two and a half years after Pearl Harbor



AT FIRST GLANCE, the war seems very remote from this snug harbor. Even that wartime code hoist at the mast of Captain Ben's smack hardly dispels the illusion of peace and contentment.

But if you'll just step inside the Cannery... you'll learn what the war means to the stern people of this rock-ribbed hamlet.

They aim to can a lot more fish this year... over last. A lot more. Herring. Mackerel. Sardines. For our fighting men... your pantry... for Lend-Lease.

And they'll do it. And do it better than ever before.

Why? Over there in the corner of the Cannery is a Lixator. It's the machine that produces the brine vital to fish packing.

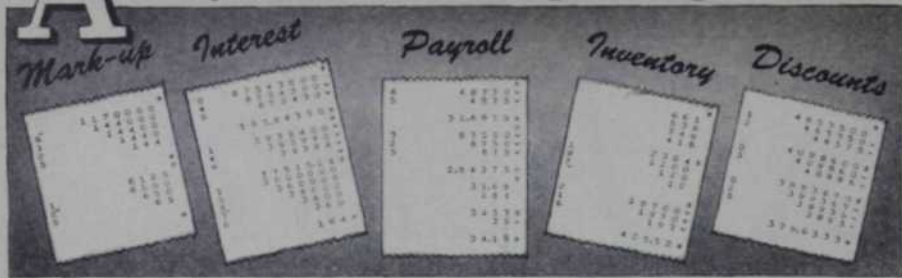
But this brine is no ordinary solution of salt and water.

Lixate brine is always 100% saturated... always sparkling with a crystal clarity that bespeaks its purity. It keeps the catch glistening and wholesome—ocean fresh. It imparts just the right amount of salt to bring out the full, delicious flavor of the delicate meat.

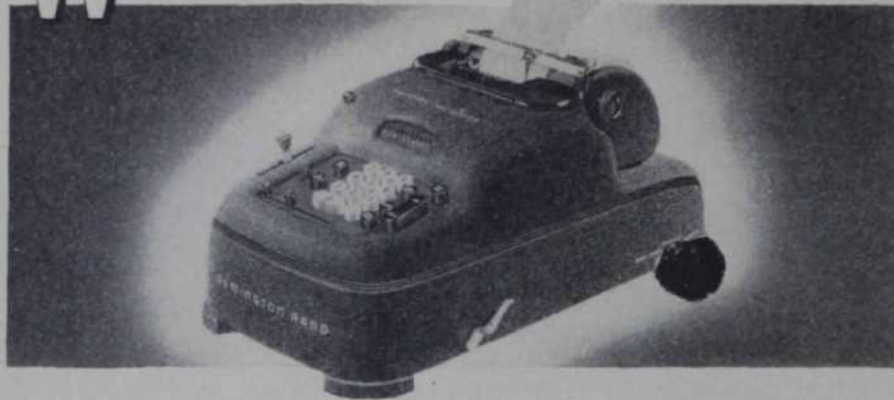
The exclusive *Lixate process for making brine* is another reason why America's industries—both big and little—refer to International as "Salt Headquarters." Along with other unique International salt processes, it improves production; saves man-hours and money. And by the same token, the brand name, Sterling Salt, is as familiar to industry as it is to millions of housewives.

International Salt Company, Inc., Scranton, Pa., and New York, N. Y. Sterling Salt for every use—in industry, agriculture, the home.

ALL your office figuring...



With this one amazing machine!



IF your figure-work calls for division or multiplication, you don't want an adding machine. If you have adding and subtracting work, you don't want a calculator. You *do* want the Printing Calculator because it combines in *one* mechanism the best features of *both*—and always, on *every* problem, it prints a permanent record of every calculation. It is truly the *only* all-purpose figuring machine.

Yes, ALL-PURPOSE... for ALL your office figuring—costs, estimates, invoices, payrolls, inventories, discounts, formulas, percentage problems of all kinds. The Printing Calculator takes them all in stride.

The work it performs is fast and automatic—and you can prove it's right the first time. There's never any need for copying the answer from dials... never a need for re-run to prove accuracy... because the Printing Calculator can't "lose" a single factor of any problem. That's why it delivers real manpower savings in these days of short-handed office staffs.

Remington Rand Printing Calculators are speeding the flow of vital figures in thousands of businesses all over America. A demonstration, at any Remington Rand office, will show you how it can help *your* business, too. See it in action today!

This machine available on WPB approval, to help conserve manpower, expedite war work, maintain necessary civilian economy. Ask our representative for details.

AUTOMATIC PRINTING CALCULATOR

by Remington Rand

The only PRINTING calculator with automatic division

tongue, a first-aid grammar has been prepared which combines amusement with instruction. In the lessons he reads:

"He was just like a man (who, whom) had been married for years. Only he was too bashful to say he had a girl."

Joe will strike out one of the debatable words and thus learn grammar by ear. Later he will write little stories about his mates, trying to put the who's and whom's in their place.

Preparing for postwar

TWO things should be said at this point.

The first is that industry might well look for a second time at these G. I. schools. Perhaps one man in ten in the American Army has been more or less exposed to education through these courses. The best the USAFI can do is to guess at the number.

But if the heads of industry—the factory and shop managers and live-wire bosses on their way up—were to make it their business to find out how many of the men inducted from their shops are studying the correspondence courses it seems to some people that, when the war is over, these managers would know where to go for the youngsters who will be the bosses in the future.

The present bosses might start on that. They might even write letters to the men taken from their shops and ask questions. No harm could be done. The man out there in the mud would warm up a bit toward the Old Man if the Old Man had heart enough and gumption enough to write a letter. Every one of these USAFI students, so far as can be seen by a reading of the letter files, wants to come home to a job. He will be more fit for that job if he gets a heartening slap on the back now and then. And these youngsters are getting the toughest kind of experience in their trades. A man who can repair a motor under shell fire will not be worried much by the incidents of daily life in a garage.

These learners seem to be getting more of an education than they ever did in school. It may be that American educators will adapt their present methods to those of the USAFI.

Some one said recently that the average college course merely offers a chance for bright young men to waste the formative years of their lives in the most delightful manner possible.

The students of the USAFI courses study what they want to study. There was a demand for history, for example. The men who had a bent in that direction had been exposed to history classes from the fourth grade on. But they wanted more history. The booklets on World History and American History are considered models of their kind.

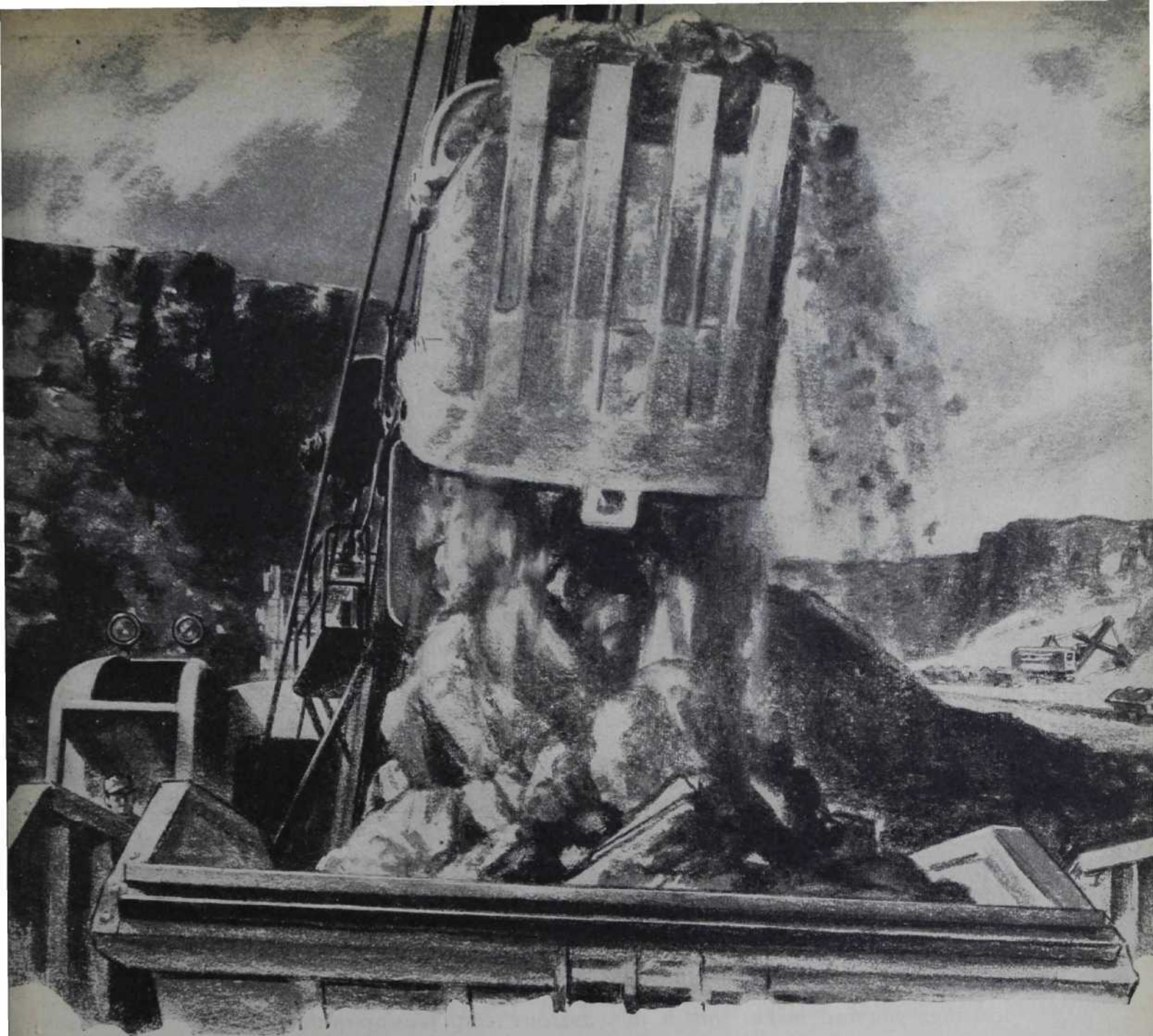
Those inclined toward civics are offered courses in American Government and Economics. Six courses give them all the mathematics they can use unless they aim toward life on a college faculty. They may study general science, chemistry, bookkeeping, shorthand, cost accounting, railroad rates or traffic management, machine shop practice, mechanical drawing, plumbing and heating



I LIKE its 10-key keyboard. We need no specially trained operators.



I LIKE the way it provides double facilities on a single investment.



Rubber Mine - 1944!

Yes, today, rubber is actually being mined. Not latex, to be sure, but the vital element from which a widely used synthetic rubber is made. The transition from rock to rubber begins with ordinary limestone, a plentiful source of carbide. And from carbide comes acetylene, basis of the new material.

American vision recognized the need for such a process. American genius developed the method itself. And American mass production brought the plan to fulfillment.

Today, limestone pours from the nation's quarries in a never-ending stream as P&H Electric Shovels dig night and day to keep pace with war's ravenous appetite for vital raw materials... limestone, copper, iron ore, coal.

In meeting today's challenge of war, the big P&H Electric Shovels have already begun to answer the challenge of tomorrow with swifter, steadier, lower cost production than has ever been known in large scale mining.



HARNISCHFEGER
CORPORATION

EXCAVATORS • ELECTRIC CRANES • ARC WELDERS

Overhead Cranes • Electric Hoists
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Arc Welders • Welding Electrodes

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HOISTS • WELDING ELECTRODES • MOTORS

KNOW HOW



THE only thing that interests you about non-ferrous ingot made by Michigan Smelting is the kind of castings you can make from it in your own plant. How accurately do we hold to your specifications so that wastage and spoilage will be held to an absolute minimum? On that point the "know-how" of this organization is important to you.

For it is your guarantee of satisfaction with our product. Fifty years of experience in the refining of non-ferrous scrap, plus up-to-the-minute equipment, enable Michigan Smelting to make ingot to the most rigid and exacting specifications—a product that in many respects is superior to alloys of virgin metals.



BUY
WAR
BONDS



REFINERS OF NON-FERROUS SCRAP
METALS FOR OVER 50 YEARS

MICHIGAN SMELTING and Refining

Division of

BOHN ALUMINUM & BRASS CORPORATION • Detroit, Michigan

General Offices: Lafayette Building

drawing, machine design, and electricity.

And this is only a dim glimpse at their opportunities.

That they were appreciated is evidenced by the fact that, when Guadalcanal was at its hottest, 252 students were at work on their courses. The ages run from 18 to 55. Their APO addresses range from the tropics, the desert areas, the Arctic regions, to ship and shore stations. Men in all branches of the armed services are eligible for enrollment.

And—this is especially called to the attention of civilian educators—they are all interested. Because they are interested they are making good. Their examination papers prove it.

Profits from Adversity

(Continued from page 44)

Machine costs, old methods, were \$18.01 per acre; now, fully mechanized, the cost is \$22.93. Labor costs, old methods, stood at \$59.51 per acre. With machines taking over, the labor cost is \$23.72 per acre. Adding all costs, each method, shows this; a former cost total of \$77.52 per acre, the fully mechanized cost \$46.65.

This change, an actual revolution, is not just beginning; it is well under way. By 1947 it is expected that all fields will be planted with segmented seed; the first big step. Only minor adjustments and fittings are needed to adapt present cultivators to block beets, thinning them to an average of one per running foot of row. With segmented seed used, every grower, with small cost, can resort to mechanical thinning.

Last year 200 mechanical harvesters were operating; this year there will be more than 800.

Already investigations are under way to dehydrate beets at points too far distant to transport fresh beets. Infra-red rays used in drying prevent loss of vitamins. Farmers now far from "beet districts" may be able to grow beets for dehydration.

Dehydrated beets can be stored and processed after local supplies are exhausted; the 80 factories now operating five to seven months each season, may give steady employment all year and double their output.

Starting at the very first point—the lowly beet seed—our beet sugar industry is reorganizing processes in a typical way. Pressure started it, postwar outlooks spurred it on. With bare-handed science, hard-fisted ingenuity, the industry is placing itself in a position to meet all tomorrows.

Any business that gets on its toes, out of past ruts, starts at the very simplest steps, as sugar solved the problem of multiple seeds clusters, and works right on through its line of production, has a real chance in the days ahead. Those that do not may meet troubles. Perhaps the beet sugar industry has presented a basic design for action that can be followed profitably in many another field.



Illustration shows COMMERCIAL CONTROLS Metered Mail Machine

When ALL of Your Mail Goes by AIR

YOU'VE heard plenty about the coming air age. All indications today point to a tremendous expansion in air service—passenger, freight, express, mail. And it is more than possible that *all of your mail will "go by air."*

Be sure you get the full advantage of this flying speed in mail delivery after the war. Don't let a *slow, old-fashioned* mailroom in your own office hold things up.

The postwar mailroom must have modern, mail-handling equipment to keep pace with a new faster-moving

business world! It will be "the heart of every office," as important as any other department. So plan it *now*—and plan it well, with the aid of a COMMERCIAL CONTROLS specialist.

When Victory is won, we will again produce equipment for Complete Mailroom Service to help put "wings" on your mail in the coming air age.

Metered Mail Systems . . . Postal and Parcel Post Scales . . . Letter Openers . . . Envelope Sealers . . . Multipost Stamp Affixers . . . Mailroom Equipment. (Many units available.)

Attend the Annual Conference of the National Office Management Association, June 5, 6 and 7, New York, N. Y.



COMMERCIAL CONTROLS

Division of NATIONAL POSTAL METER COMPANY, INC.

Rochester 2, N. Y.—Branches and Agencies in Principal Cities

Wichita Does Something

By BLISS ISELY

"WHY doesn't somebody do something about—" is an old plaint. These Kansas citizens acted on it

PATTERNING their procedure after the town halls which successfully battled for liberty at the outbreak of the Revolution, citizens of Wichita, Kansas, have organized a Town Hall Committee to campaign for restoration of rights which they contend have been usurped by federal bureaus.

Committees of correspondence, also patterned after committees of colonial times, are writing to citizens in each of the other 47 states, explaining the plan of organization and helping with the organization of town hall committees elsewhere.

The announced Town Hall purpose is: "To form a non-partisan educational association to help restore to state and local governments the non-federal functions now exercised by the federal Government; to disseminate information among the citizens of the country so that they may be aroused to the present dangers and elect representatives to Congress who will bring about the abolition of government by bureaucracy."

The membership includes practically every occupation in the city. The members of the Wichita committee meet every Wednesday at luncheon. They send speakers to promote Town Hall Committees throughout Kansas and have entered into correspondence with individuals in every state in the Union. In some states they have more than 100 correspondents.

The Wichita group seeks to organize a Town Hall in every city and town in America and offers to send a copy of its plan and declaration to anyone who writes to the Town Hall Committee, 510 Bitting Building, Wichita 2, Kansas.

The idea of the Town Hall came to a group of business men around a luncheon table where they were discussing the probability that federal bureaus created by the war would be made permanent. They recalled that many bureaus created to cope with emergencies during the depression have remained till the present.

One man at the table read a list of 20 federal bureaus which have drawn plans for more than 200 make-work projects to go into effect after the war. These



Wichita's Town Hall, symbol of the stand against bureaucracy

plans mean continued officeholding for the bureaucrats. The plans are designed to employ returning service men in a glorified WPA at a cost of billions of dollars levied as a tax on free enterprise.

Neil C. Kreeck, one of the eight members of the advisory board of the Conference of American Small Business Organizations, who was present, declared that as things are drifting, government will take over all business, including his own pie-baking business.

"Why doesn't somebody do something?" one of the group asked.

That struck a spark. They called a mass meeting of citizens, hoping to interest about 1,000 men. To their surprise 3,500 turned out and, amid cheers, adopted the Town Hall declaration, organized the Town Hall Committee and ratified the choice of E. C. Moriarty as president. Mr. Moriarty is mayor of Wichita's non-partisan city-manager government.

Mr. Moriarty emphasizes the non-partisan character of the committee. He reminds all who talk to him that bureaucracy has been growing for a long time under Republican and Democratic

administrations and has merely been stepped up under the New Deal. He believes that free enterprise alone can offer employment with a future to returning service men and that it cannot do its best if it also must support a wasteful make-work program.

Mr. Moriarty gives assurance that the Town Hall seeks no favors for any group and is organized only to fight for a return of constitutional government. It will endorse no candidates. Each Town Hall Committee, working in its own congressional and senatorial campaigns, will ask candidates to state their stand clearly regarding bureaucratic government. Replies will be published as a guide to the voters. After the elections, the committee members, each in their own states and districts, will strive to hold their members in Congress to their campaign pledges.

L. B. Brown, non-salaried secretary-treasurer of the committee, explains the greatest task is to educate the people.

Stress the Tenth Freedom

"WE have forgotten our rights," he says, "forgotten that the legislative branch of our government is equal to the executive; forgotten that all dictators, from Caesar to Hitler, gained supremacy by persuading the legislative branches to surrender their powers."

"Congress has weakened itself by creating bureaus responsible only to the President, and such bureaus issue directives that trample on the Constitution and the rights of the people and yet have the binding force of law. We hear of Four Freedoms and forget our Ten Freedoms contained in the Bill of Rights of our Constitution."

The Town Hall Committee stresses the Tenth Freedom contained in the Bill of Rights which reads:

"The powers not delegated to the United States by the Constitution nor prohibited by it to the states, are reserved to the states respectively, or to the people."

As town hall committees are organized throughout the country, each will be independent, although they will work together through committees of correspondence. The Wichita group recommends that a wide variety of membership be obtained. In Wichita the board of directors includes two insurance men, two oil operators, a stockyards officer, a theater owner, a dentist, a flour miller, a pie baker, a painter, a geologist, an attorney, an accountant, a ranchman, a printer and a poultry dealer.

Kodak's K-24 Aircraft Camera is completely automatic. In reconnaissance, you push a switch button on your "stick" and the camera, in the nose or tail, clicks away. In a bomber, it is in the plane's belly, connected through complex electrical controls, with the bombsight itself. Its focal plane shutter, power operated, has speeds of 1/50, 1/450, 1/900, and "time." It is

fitted, as are most other aerial cameras, with Kodak aerial lenses, including Kodak Aero Ektars incorporating elements of Kodak's revolutionary new optical glass... interchangeable in a range of focal lengths and speeds for different missions. Uses Kodak Aero Films in pre-threaded interchangeable magazines holding 56 feet, enough for 125 pictures, 5 inches square.



K-24 Aircraft Camera, built by **Kodak**, *"runs its own show"*

Bombardier, at left, is hunched over his bombsight which is electrically coupled with the camera, automatically taking pictures every time bombs are released. At right is a gunner covering the nose with his "fifty."

TANGLING with fighters and flak while making a bombing run... or scurrying over enemy country at low altitude on a reconnaissance job... the last thing you have time for is "keeping a snapshot record of your trip."

Yet in reconnaissance, that's really what you're out for—and in bombing, you want to bring back "picture information" on the relation of your falling bombs to the target... for the camera makes a record of details you couldn't possibly see and remember.

Pretty hopeless, without a camera that "runs its own show"... Kodak's K-24 does just that.

On a reconnaissance flight—with no bombs to unload—you press a button for each picture, operating the fixed-position camera by remote control. Or, if you want a series, simply hold the button down, and the camera takes 3 pictures a second.

"Chalking up the score" in the training of bombardier and pilot is another vital phase of the K-24's activity—to know how good you're

getting to be, you consult the photographic evidence.

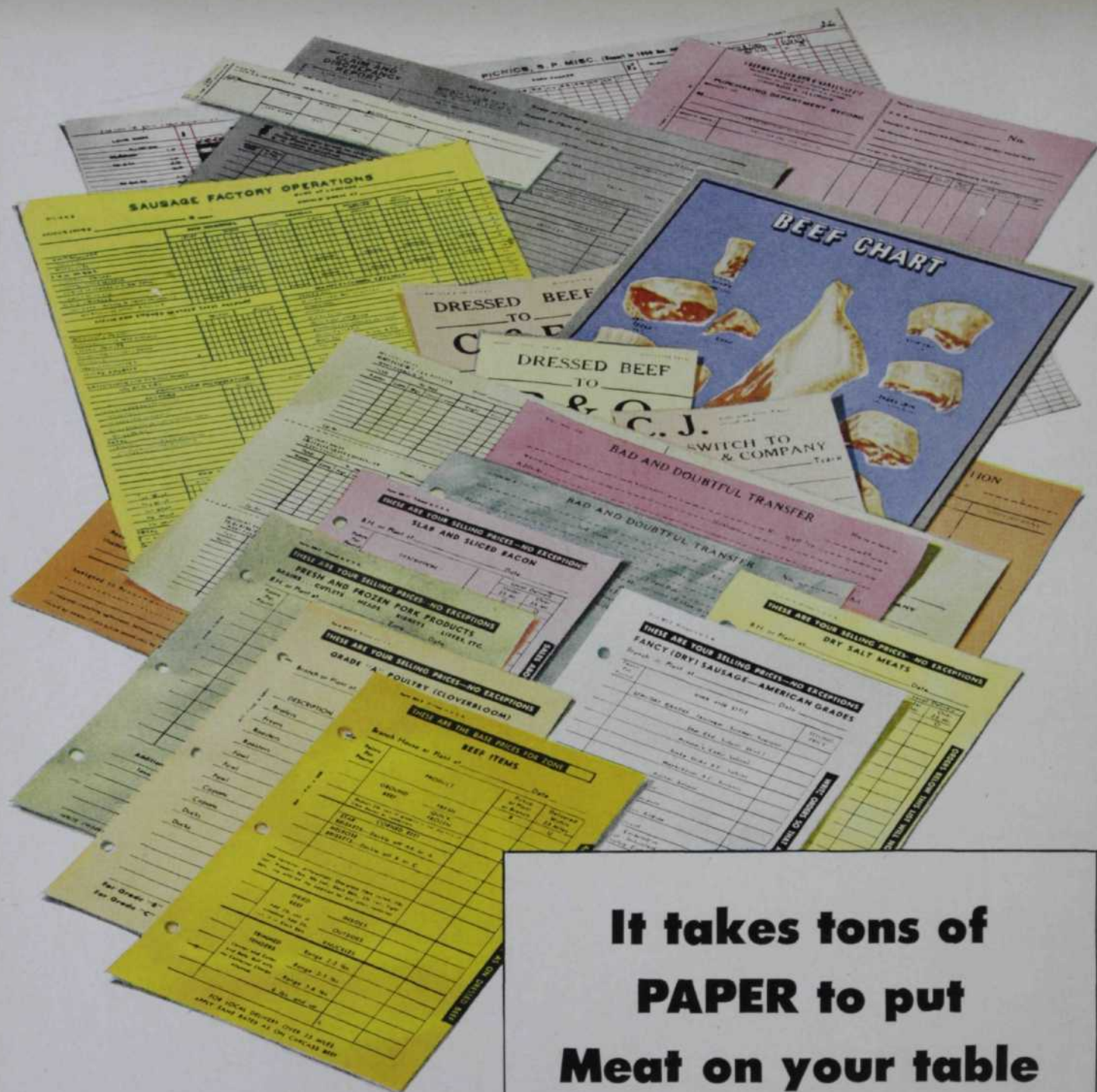
The K-24 is no hero—the pilot and crew play that role. But it does take a lot off a hero's mind.

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

REMEMBER THE PLOESTI RAID?—how at the cost of more than 500 trained fliers, our Liberators fought through one of the most heavily fortified areas in the world, to drop the bombs that knocked out one-third of Germany's oil supply?—how some of the pilots who missed the target on their first run turned back and flew through solid sheets of flame to try again? A stern example for us at home.

BUY MORE WAR BONDS

Serving human progress through photography



It takes tons of PAPER to put Meat on your table

**KIMBERLY
CLARK**
CORPORATION
NEENAH, WISCONSIN

From the time that "little pig goes to market", more than 200 essential pieces of paper are required to get him through the packing house.

Paper tags show when each piece of freshly slaughtered meat is placed in refrigeration. Paper charts enable packing house engineers to maintain exact temperatures for different cuts and without these vital pieces of paper, meat would spoil.

Without waxed paper wrapping, hams and bacon would receive "freezer burns" . . . without paper lining for trucks and refrigerator cars, meat would become contaminated in transit.

Indeed, it takes millions of pounds of paper to keep meat moving to our armed forces, to lend-lease, and to your table.

SAVE WASTE PAPER • Paper is vitally essential in winning the war. So make full use of every piece of paper. Save every bit of waste paper and have it collected each week.



Levelcoat® PRINTING PAPERS

While conserving America's critical materials in every way possible, Kimberly-Clark is producing the finest quality Levelcoat Printing Papers that can be made under wartime restrictions.



TRADE MARK

Trade Groups Do a War Job

(Continued from page 46)

1. Expediting production of war materials.
2. Developing new products.
3. Recruiting skilled workers and trained personnel.
4. Establishing communications systems for civilian defense.
5. Raising funds for Army and Navy Relief Societies.

The trade associations have applied themselves wholeheartedly to the particular problems of each individual agency. Where the labor and manpower agencies have been involved, for example, the associations have arbitrated labor disputes, streamlined production activities in cooperation with the War Manpower Commission to conserve labor, prepared training time tables and job dictionaries for WMC, prepared studies on effects of selective service on war production.

Programs to help victory

A NUMBER of association activities have tied in definitely with the health and welfare of the American people. Take food, for example. Associations have made surveys of equipment needed by industry to produce additional food supplies; have stimulated home canning and victory gardens; have sponsored the preparation and dissemination of booklets, reports and bulletins devoted to food and appliance conservation.

In cooperation with the ODT and other agencies, they have developed programs for conserving tires, gas, oil and other vital fuels and materials. They have cooperated in enforcing rationing regulations and have done a tremendous job in disseminating information about rationing and price control.

In answer to one question, associations listed in the order of their importance their services to members, which, in their opinions, aided members' contribution to war effort. Here are the eight major items of assistance given members in connection with government agencies:

1. Informed government agencies of the position and importance of members' products and facilities available for output of war goods.
2. Arranged meetings between members and government representatives on specific problems dealing with members' raw material needs and priorities.
3. Helped members in their individual problems with government agencies, such as priorities.
4. Established Washington office to assist members in obtaining materials, expediting contracts, conferring with government officials, and getting answers to their individual problems.
5. Helped members in the filing of appeals to avoid individual hardships caused by certain orders and regulations.
6. Informed members of the location and procedure of procurement agencies.

7. Provided members and non-members with inspection services acceptable to government agencies.

8. Arranged regular meetings between government representatives and members.

Fifty-eight different projects are listed under various headings, such as "assistance to members on government regulations; statistics, surveys, research; labor; production, procurement, priorities; associations, equipment, materials; and miscellaneous." That miscellaneous list has some interesting items, such as instructing members in packaging methods to conserve gasoline and rubber, and helping develop solutions on war contract termination problems. Associations have assisted members in obtaining passports, flying priorities, ocean bookings, as well as recovering insurance funds on lost cargo.

Associations, of course, are not merely doing one particular job well; many are doing scores of jobs with equal ability. The National Electrical Manufacturers Association, for example, has not only increased its service to members, it has done yeoman work for the war effort. A job rating manual and a conversion booklet eased the plight of many manufacturers. Members got daily information on priority regulations, while valuable statistical data were made available to war agencies.

As a good neighbor gesture, the association arranged for, and financed the translation into Spanish and publication of, the National Electric Code for the benefit of Latin-American countries.

Saving through associations

THE final question in the survey: "Have you any suggestions for increasing the contributions of trade associations to the war program?" really stirred some interest.

Here are the committee's own words on that question:

"This question was perhaps the most fruitful in the entire inquiry. While opinion ranged from the belief that, if associations should do their job well, their positions in the economy would be assured, to expressions that an aggressive publicity campaign of association contributions to the war effort to secure greater recognition should be instituted, there seemed to be agreement on one important point.

"Practically all believed that the association's contribution to the war effort could have been greater had government agencies utilized these tools to anything like their full potentiality. Much waste of time and duplication of effort could have been avoided in organizing the economy for war. Too frequently the experience of association executives was not called upon, and costly mistakes and delay in reaching a desired objective resulted."

Further proof that the trade association technique offers a means of meeting



Saving Coal

is

Iron Fireman's Job



FUEL conservation is a new effort for many Americans—but it has been, and now is, Iron Fireman's regular job. Iron Fireman automatic stokers have been saving coal, and users have been reaping the gains of coal savings for more than 20 years.

Right now, in thousands of heating and power plants throughout the United States and Canada, Iron Fireman owners are saving coal, saving labor and saving money with Iron Fireman automatic stokers. Iron Fireman's automatic firing and scientific combustion gets more heat, more power from coal than was ever before thought possible.

Iron Fireman Stokers Are Available Now

Because Iron Fireman automatic stokers save coal, new regulations make owners of heating and power plants (other than residential) eligible to apply for immediate stoker installations. Our nationwide organization of qualified factory representatives and dealers is at your service. Iron Fireman Manufacturing Co., 3214 West 106th St., Cleveland 11, Ohio.



IRON FIREMAN

Automatic Coal Stokers

"Imagine *Me* being called an 'Efficiency Expert'"



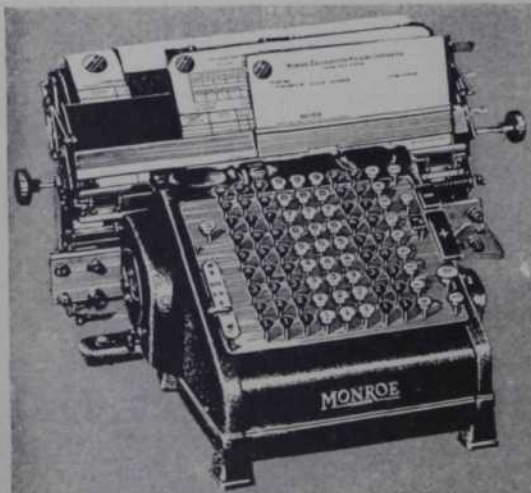
She is doing a fine job in this man-power shortage.

Praise is certainly due her—and thousands of others who, with the help of Monroe, are performing Miracles of Production in the offices of war-time America.

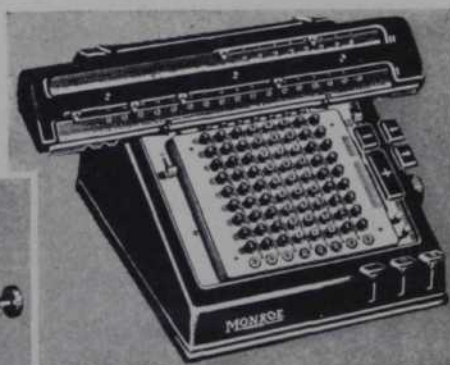
Payroll calculations and records; statistics; analyses; estimates; reports; invoices; costs and percentages; inventory; posting and accounting procedures—

these are the life blood of business. The job of Monroe is to keep this vital work flowing . . . ready when needed . . . accurate.

Call the nearby Monroe branch . . . learn from our representative the availability of Monroe Calculating, Listing and Accounting machines under existing conditions. Let his experience aid you in effecting short-cuts and simplifications to make working hours more productive.



Monroe 209-485-191 Accounting Machine



Monroe MA7-W Calculator

Ask about our Guaranteed Maintenance Plan to keep your Monroes in top operating condition. Without obligation get your copy of the book

MONROE SIMPLIFIED METHODS FOR PAYROLL CALCULATIONS

from our nearest branch, or write to Monroe Calculating Machine Company, Inc., Orange, New Jersey.

many problems that are difficult to handle in other ways, comes from the War Advertising Council and the Council of Electric Operating Companies, both formed to meet war needs.

Three weeks before Pearl Harbor, at a convention at Hot Springs, Va., various advertising and publishing groups discussed in a vague way the formation of a general group which would organize and clarify advertising's contributions to the defense effort. When war came, this group went into action with Chester J. LaRoche, chairman of the board of Young & Rubicam, as the first chairman.

Under the title Advertising Council, later changed to War Advertising Council, the group placed at the disposal of the various war agencies advertising's tremendous talent, and at the same time, undertook to inform industry on the need for various campaigns. Last year alone, \$352,650,000 in war theme advertising was placed by American industry, in contrast to \$2,000,000 for all of World War I.

The Council of Electric Operating Companies was formed in January, 1942, after a series of conferences. It was dedicated to a single purpose—to place itself at the disposal of the Government for whatever it might be called on to do toward promoting victory. It has helped determine policies of power pooling, distribution of surplus materials, and pooling of inventories. The council has assisted in working out classification of critical jobs for guidance of local draft boards.

All trade association executives agree that out of their war experience they have developed new and better methods of serving their industries.

They expect to be of as much, or possibly more, service to the public in the postwar period because of what they have learned about dealing with government agencies.

The conversion job will be an emergency, but, after all, good trade associations thrive on emergencies.

Waterproof Dirt

A CHEMICAL method has been developed for waterproofing soil for use in building airplane landing fields and for stabilizing unsurfaced dirt roads.


Stabinol, a resin compound, mixed with the top few inches of soil not only makes the soil waterproof so that surface water will drain off or evaporate, but so that it also resists the capillary rise of moisture from below.

A car splashing through a puddle on a Stabinol-treated road will kick up dry dust, not mud, behind it. Only fractional amounts of the new chemical are required—usually about one per cent of the total soil to be treated—and the stabilized soil has the same appearance as the original dirt. Experimental plots thus treated five years ago are still waterproofed.

Stabinol has been developed by Hercules Powder Company.

MONROE

CALCULATING • LISTING • ACCOUNTING MACHINES



WHERE DOES AMERICA GET MOST OF ITS ELECTRIC POWER?

Prepare yourself for a surprise.

Every time most people switch on a light, listen to the radio, or use a percolator or any other electrical appliance, they are burning bituminous coal.

For most electric power comes from coal—which means, of course, bituminous coal.

For one thing, a ton of water would have to drop a mile to generate the same amount of energy as there is in a pound of coal, properly burned.

For another, an electric power plant which uses coal ordinarily costs only about one-third as much to build as a hydroelectric plant having the same capacity. And in most parts of the country it is usually much more economical to carry coal from the mine to the place where it is needed

to make electric power than it is to transmit the same amount of electric energy from a power dam.

These are only two of the many reasons why bituminous coal is "No. 1 Public Energy"—America's most important source of heat and power.

And, knowing this, the men who operate the bituminous coal mines have a keen sense of responsibility to the nation, to their customers, and to the men who work for them.

BUY MORE WAR BONDS

BITUMINOUS COAL
Institute

60 East 42nd Street, New York 17, N. Y.

How to Deal with Three-Faced Japan

(Continued from page 29)

Though Asia was only half as good a market for the United States as either Europe or North America, Japan normally accounted for close to half our exports to Asia. Japan processed most of it to compete with us in other world markets. The markets will still be there but the trade channels must change.

Any map of the Pacific shows Japan's rapid rise to empire and the big task ahead before it is shorn as promised in the Cairo conference. Only 30,000,000 Japanese were in the world when Commodore Perry arrived. Today there are 73,000,000. A Japanese encouraged fallacy is that an overpopulated homeland must have room to expand.

Japanese do not colonize, only exploit. Even Hokkaido, largest and northernmost of its islands, is thinly populated.

More graphic than words are the figures which show how the flag of the Rising Sun has spread over other lands:

	Square miles	Population
Japan (1858)	148,756	72,875,800
Colonies (1894-1919)	112,014	32,350,301
Manchuria (1931)	503,013	39,454,025
	763,783	144,680,127
China (1937)	400,000	120,000,000
Philippines	115,600	16,356,000
Guam	206	22,290
Dutch East Indies	735,168	67,000,000
Indo-China	281,174	24,461,250
Thailand (Siam)	200,148	15,718,000
Portuguese Timor	7,330	463,796
Macao (de facto)	6	340,260
Straits Settlements	1,356	1,435,895
Federated Malay States	27,540	2,212,052
Unfederated Malay States	22,070	1,912,497
North Borneo	29,500	270,223
Brunei	2,226	30,135
Sarawak	50,000	490,585
Burma	261,610	14,667,146
Hong Kong-Kowloon	391	1,821,893
Gilberts ¹	180	32,838
New Guinea ²	90,540	338,822
Solomons ²	93,000	668,871
Acquired (1937-42)	2,318,045	268,242,553
GRAND TOTAL	3,081,828	412,922,680

¹ Recaptured

² Partially recaptured

China is pictured as immense in area and population. When its occupied portions are deducted and added to Japan, the Nipponese empire is a match.

These occupied territories are the im-

mediate stakes in the war in the Pacific. Isolating Japan after the war should be the concluding step. Without imports of raw materials for heavy industry and without foreign markets, Japan will be powerless as a troublemaker.

Japan is an island empire and control of its ports alone can enforce an embargo to preserve peace. It will require a show of force, inevitable in a world not yet converted to peace. Other nations, lured by the once rich trade with Japan and too shortsighted to see that the world grows smaller for them as a strong Japan expands, may not agree.

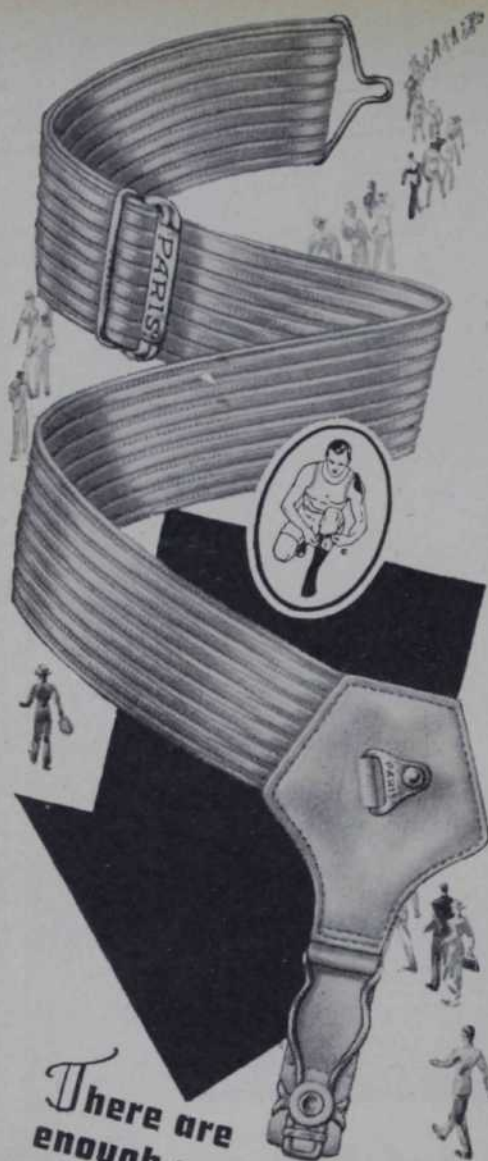
The solution must be written in the peace treaties. The victorious navies can enforce the terms without an army of occupation as in any other country.

All Japan's energies will be needed to wrest enough to eat from its own soil and sea. Forcing an industrial nation back to the simple life may seem cruel but, after their brutalities, the Japanese may be grateful to be caged on their islands instead of being exterminated. It is more gentle than would be decreed by their overweening ambition which foresees extermination or slavery for the rest of the world.

It will be a revolution in the trade of the Orient. Letting Japan hold what it has, also would be a revolution and at the expense of every country except Japan.

With three-faced Japan penned inside its 17,000 miles of coastline, the world need not worry about the crusading diplomats and aggressive militarists or how Japan settles its internal affairs. Without foreign commerce, except to meet its own consumer needs, Japan cannot disturb the peace of the world.

Isolating Japan is the only solution. It is direct, effective and conclusive, one solution in place of halfway measures which may be proposed. It must be permanent to cure a megalomania of 2,600 years. Otherwise, Japan will rule the world and the other nations of today are doomed to extermination or slavery.

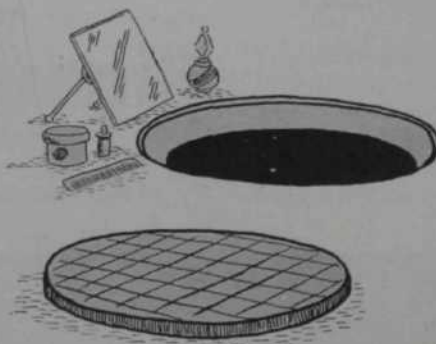


There are enough men wearing PARIS Garters to elect the next president easily!

America's best garter is Paris, and America says so in Paris sales. The famous "Paris Kneeling Figure" trade mark is your dependable guide to comfort, value and service.

Trade marks are a double protection. They enable you to reject as well as to select. When you say "I want Paris—and not a substitute"—you exercise your right to choose what you use. Protect this privilege. Trust the trade marks which have stood the test of time.

Paris Garter illustrated—all elastic, \$1. Part-elastic styles, 55c. A. Stein and Company • Chicago • New York Los Angeles



KEZIAH

Your Government —in 194X

(Continued from page 22)

ment involve nearly every state west of the Mississippi and the amount of money involved is estimated at \$20,000,000,000 to \$25,000,000,000. The department has about 34,000 employees now, compared with its former peacetime level of 45,000.

The Agriculture Department has 76,000 employees now, which is 22,000 fewer than before the war, but it expects to get back to its former strength in 194X. Vast expansion of Rural Electrification Administration and Soil Conservation activities are being mapped out. The department expects to be called on to help war veterans buy farms. Production restrictions may be brought back, too.

On the other hand there's a definite group in government who believe a "new approach" will be made toward agricultural problems after the war and that this approach will involve fewer government controls and the cultivation of foreign markets to consume surplus production. If this happens, the department would be smaller than now.

The State Department is bound to grow, world politics being what they are now and what they'll be in 194X.

Plans for more commerce

THE Commerce Department has orders from the House Appropriations Committee to provide better service to business men in the postwar period. And it's making extensive plans along those lines. Certain to grow fast is Commerce's Civil Aeronautics Administration which will be called on to help develop and control the inevitable boom in postwar civilian aviation. And the disposal of surplus war materials will be tied in closely with the department, if not actually made part of it.

Most every other established department and agency hopes to expand moderately in 194X. After the war, remember, federal employees will work 22 per cent less time than they do now. Their work week will be cut from 48 to 39 hours and they won't be compelled to work five out of six national holidays. This will necessitate more people to carry on the work.

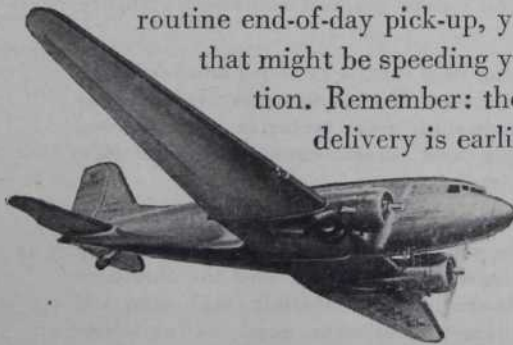
But the annual budget in 194X won't be a moderate increase over what it was in the peaceful 1930's, you can be assured of that. These will be some of the large items in that budget:

Interest on the public debt—\$6,000,000,000, and perhaps more, depending on when the war ends and how long our country continues its deficit financing. This amount alone is considerably larger than the annual budget in the early 1930's.

The 1945 budget carries \$3,750,000,000 to pay interest on a public debt of around \$250,000,000,000. This interest figure is generally misunderstood. In the first place, it's six months behind, and



AIR EXPRESS is a 3-mile-a-minute conveyor belt between your plant and consignee. *Use it efficiently!* When shipments are ready, call for a pick-up...right then! If you wait for routine end-of-day pick-up, you let a lot of planes go by that might be speeding your shipment to its destination. Remember: the secret of earliest possible delivery is earliest possible shipment!



A Money-Saving, High-Speed Wartime Tool For Every Business

As a result of increased efficiency developed to meet wartime demands, rates have been reduced. Shippers nationwide are now saving an average of more than 10% on Air Express charges. And Air Express schedules are based on "hours", not days and weeks—with 3-mile-a-minute service direct to hundreds of U. S. cities and scores of foreign countries.

WRITE TODAY for "Vision Unlimited"—an informative booklet that will stimulate the thinking of every executive. Dept. PR-5, Railway Express Agency, 230 Park Avenue, New York 17, N. Y.

AIR EXPRESS

*Gets there **FIRST***

Phone RAILWAY EXPRESS AGENCY, AIR EXPRESS DIVISION
Representing the AIRLINES of the United States



Take a Lesson from *this fellow!*

With amazing, almost human intelligence, the beaver locates and builds only where he finds an abundance of the things he must have for survival — where conditions are most favorable for construction of his lodge and dam. To this "engineer" of the animal world, careful choice of location is the prime requisite.

Today, industry's first job . . . the job of all America . . . is to help win this war. The second job, equally important, is to plan carefully now, so that the nation's progress and economic stability will be assured.

Alert executives are planning now for the changes and responsibilities that will come with Victory. Their engineers are thinking in terms of reconversion, expansion, new factories. In postwar planning, thorough investigation and careful consideration of new plant sites are of the utmost importance.

Norfolk and Western territory has the elements essential to postwar industrial progress. This area — between the Midwest, the Virginias and Carolinas and between the North and the South — offers a variety and an abundance of raw materials, including all-purpose bituminous coal; a satisfactory climate, good, native labor; a year-round, ice-free seaport at Norfolk, Va., and proximity to great producing and consuming markets. Precision Transportation of the Norfolk and Western Railway completes the picture.

The staff of the Norfolk and Western's Industrial and Agricultural Department at Roanoke, Va., knows this territory. It is equipped to aid you in postwar plant location. Write for specific information about the territory's resources and advantages. Your inquiry will be held in the strictest confidence.

NORFOLK and WESTERN *Railway*

ONE OF AMERICA'S RAILROADS . . . ALL UNITED FOR VICTORY!

BUY MORE WAR BONDS

secondly, it's widely overlooked that the rate of interest on war bonds increases the longer they are held by investors. These facts have brought Federal fiscal experts to the conclusion that interest on our current debt will be well over \$5,000,000,000 annually in 194X even if the debt itself doesn't grow another penny.

Veterans will be costly

VETERANS will benefit—\$3,000,000,000 and that's perhaps conservative, too, depending, of course, on the length of the war, the number killed and wounded, and economic conditions.

In the fiscal year starting July 1, the Veterans Administration will have a record budget of \$1,230,000,000, and the big battles are yet to be fought. Rehabilitations and training programs are just getting under way and a vast hospital program is in the works. Mustering out pay has been voted and there is already talk of a \$27,000,000,000 bonus bill—which was a part of the so-called "G. I. Bill of Rights Bill"—and that figure alone is ten per cent more than the cost of all veterans' benefits from the Revolutionary War down to the present time. That amount is estimated at \$24,500,000,000. The cost of caring for veterans is just starting.

Army and Navy—\$6,000,000,000. A Navy planner insists that it'll take that much money in 194X to keep our Navy—larger than the combined navies of the world—afloat. Unquestionably, the Navy will have the big job of keeping peace. It'll have scores of new bases throughout the world to be maintained. Of course, the size of our postwar military forces will depend on world affairs but every responsible person in our national life regards a strong standing Army and Navy as insurance against another world war, and we're not likely to feed our armed forces on a skimpy diet of dollars as we did in the prewar years.

For all other regular government functions—\$5,000,000,000.

To be considered, in addition, is foreign relief, the so-called cradle-to-grave social security plan, and public works. Presumably, foreign relief won't be continued indefinitely, but the extension of social security and public works will be postwar issues that can't be sidestepped, and demands for them may grow rather than diminish. The cost of social security extension is estimated at approximately \$6,000,000,000 annually.

On strictly Federal public works, the Budget Bureau already has requests for more than \$7,500,000,000 worth, mainly for rivers and harbors, post offices and federal buildings and veterans' hospitals. It's estimated that \$600,000,000 of projects could be started in the first year of peace.

In purely local public works projects, the Federal Works Agency has on file about \$5,500,000,000 in applications.

Any way you look at it, Big Government will be here in 194X, say Washington observers. And we couldn't return to the government of the 1920's and 1930's even if we wanted to.



CONFIDENCE

HERE IN CHICAGO your key audience as an advertiser demands honest and dependable journalism. When evening comes a million reader-friends turn to The Chicago Daily News because it satisfies both their conscience and their intelligence. This newspaper is a powerful influence in their lives. Its strength is deeply rooted in the confidence which The Daily News has earned and kept by the steadfast decency of its publishing policies. In its advertising columns The Daily News has carried, for 43 consecutive years, more Total Display lineage than any other Chicago paper, morning, evening or Sunday.* A leadership which says over and over again that The Daily News is Chicago's

*For fair comparison, liquor lineage omitted since The Chicago Daily News does not accept advertising for alcoholic beverages

BASIC ADVERTISING MEDIUM

THE CHICAGO DAILY NEWS

FOR 68 YEARS CHICAGO'S HOME NEWSPAPER
ITS PLACE IN THE HOME IS ONE OF
RESPECT AND TRUST

DAILY NEWS PLAZA: 400 West Madison Street, CHICAGO
DETROIT OFFICE: 7-218 General Motors Building

NEW YORK OFFICE: 9 Rockefeller Plaza
SAN FRANCISCO OFFICE: Hobart Building



SIX CARS OF BLENDED AVIATION OIL ... in one-eighth the time!

This is the story of another of those it-can't-be-done jobs that helped turn the tide of battle.

Wolf's Head Oil Refining Company, Oil City, Pa., got an emergency order for six cars of Navy aviation oil, a special blend that must pass rigid laboratory tests. It was a job that would, under ordinary methods, take over 40 hours.

With a Bowser Proportioner, pumping directly into the tank cars, Wolf's Head finished the work in a few minutes over five hours. And all tests showed perfect blending.

This Bowser Proportioner blends the many different grades of oil produced by Wolf's Head... and works with almost unbelievable speed and accuracy. Speed? It blends up to 175 gallons a minute (which is in excess of the rating specified by Wolf's Head). Accuracy? Some of the proportions call for a single pint of one ingredient to 100 gallons of finished blend... one part in 800... yet every test is "right on the nose."

That's just one type of Bowser Liquid Control equipment, of course, but it has applications in many different industries and new adaptations are constantly developing.

And other Bowser equipment... meters, lubrication units, filters, pumps, stills, oil conditioners, etc... have indispensable applications in virtually every American factory. BOWSER, INC., Fort Wayne 5, Indiana.

THE NAME THAT MEANS
EXACT CONTROL OF LIQUIDS



Home Towns Plan Soldier Jobs

(Continued from page 27)

an employment agency. The chamber of commerce has neither the funds nor the skill necessary to locate a job for every man who seeks one. But it can offer its services to those men to get an interview with the head of the firm.

"Sixty top-ranking officials of business and industry are serving as interviewers spending one afternoon a month at the office provided in the chamber's headquarters. All of the public relations departments of the Armed Forces have been informed of the plan and requested to explain it to soldiers from this county. Letters have also gone to families of service men and to service men themselves and the active cooperation of the American Legion, the Red Cross, the USO, the USES, the WMC has been solicited."

Peoria Plan

A CITY-community effort to return the individual, handicapped through military service—or civilian accident or illness—to a life as nearly normal as possible has been financed by public-spirited citizens of Peoria, Ill., and many organ-

izations. It coordinates the activities of every possible interested group, local, state or national.

"The Peoria Plan," as the organization is called, has issued a 12-page pamphlet giving its aims, its functioning, an organization chart, a list of officers and sponsors.

Stamford Plan

A VITAL part of the various objectives of the Stamford, Conn., Postwar Planning Council is its rehabilitation and reemployment division. The job of this particular group is "to fit the man for the job and try to place him."

The council is sponsored by local, state, public and private organizations which are coordinating their efforts to meet the overall problem of postwar objectives such as jobs, markets, education, rehabilitation, private and public building, reconversion, sound public finance and research.

A 23-page booklet, issued by the Connecticut Reemployment Commission, includes a "directory for returning service men and women of Connecticut," giving the addresses and phone numbers

From Chamber Men

EXCERPTS from letters received from former chamber of commerce members now serving in the armed forces:

"One of their big worries and here is where the chambers come in, is 'What will be my job after this war?' 'Will I have a job?' 'Will I have to go on WPA?' Lord, how chambers of commerce would get to work on postwar planning if they would just realize that this would be the biggest stimulant that the service men could receive."

★ ★ ★

"I would say that the greatest boost to morale of all service men would be to receive a letter from their hometown chamber of commerce saying, 'We have gone over the postwar problems. We have made plans to see that industries will operate and that industries and business guarantee you a job with a living wage when you return home.'"

★ ★ ★

"Also, I'm amazed at boys, not so young either, who don't know about their chamber of commerce—never heard of it—and don't know its purposes. This is especially true in larger towns, say from 250,000 on up. Some, having good backgrounds and business experience, never knew that a chamber actually existed in their town."

The Chemistry of Fluorescent Light

MODERN electro-chemical research made fluorescent the most efficient and economical artificial light known — in war plants now, in your home when peace is won.

Here is how chemistry combined with electrical engineering to perfect a new and better kind of light:

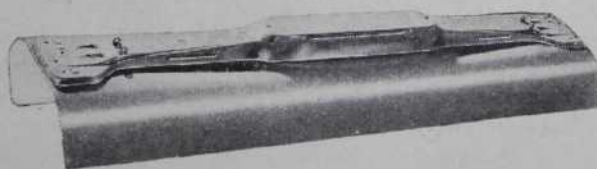
When electricity passes through a fluorescent lamp, it sets up ultra-violet radiation, which is invisible, electronic in nature, and not unlike mysterious Black Light.

It is the chemical magic of a fine coating of phosphors on the glass of the fluorescent lamp that transforms the internal radiation to visible light outside the lamp.

This chemical "transformer" brings new efficiency to the electrical production of light. Cool light with a minimum of infra-red heat waves. That's why a fluorescent lamp is so economical, why it gives $2\frac{1}{2}$ times the light for the same electrical energy.

It is because fluorescent development depends as much on chemical as on electrical engineering that Sylvania specializes in the compounding and blending of phosphors for fluorescent powder. This research has increased fluorescent efficiency and introduced lamps in colors most suitable for visual work.

That is why Sylvania lamps in Sylvania fixtures will give you fluorescent lighting at its electro-chemical finest.



THE FIXTURE OF THE FUTURE

This model HF-235R fluorescent fixture rounds out Sylvania's industrial line. Its two 100-watt fluorescent lamps in Sylvania's non-metallic reflector give maximum lighting intensities with a minimum use of critical materials. (Reflector efficiency of 86%.) Streamlined top housing provides for complete hanging flexibility and encloses the ballast for protection.

SYLVANIA

ELECTRIC PRODUCTS INC.

500 FIFTH AVENUE NEW YORK 18, NEW YORK

HELP SHORTEN THE WAR

Buy
EXTRA BONDS
NOW!



*Now is the time
to be Careful!*

THE fisherman who lands his catch safely leaves nothing to chance—and today, on vital production lines, Hardware Mutuals *policy back of the policy* is safeguarding workers by eliminating chances for industrial accidents.

The *policy back of the policy* protects the interests of policyholders by giving them first consideration. In Workmen's Compensation and Liability insurance it provides an engineering service applied with exacting care to *individual* plant needs. The result is an accident prevention plan that means safer working conditions, better conservation of equipment and materials, greater volume and economy of production. Employee and public good will gains by prompt, sympathetic claim settlements.

For more than 30 years the sound management, financial

strength and faithful service of Hardware Mutuals have meant vigilant protection in other types of insurance as well, including Automobile, Fire and allied lines, Burglary, Plate Glass, General Liability, etc. Dividend savings now totalling over \$87,000,000.00 have been returned to policyholders—another result of the *policy back of the policy*. All transactions are handled by experienced full-time representatives.

For improved safety, service and savings, investigate Hardware Mutuals *policy back of the policy*. Send for a free copy of our book, INDUSTRIAL SAFETY PROCEDURE, an important guide to better plant protection.

FEDERATED HARDWARE MUTUALS
Hardware Dealers Mutual Fire Insurance Company, Home Office, Stevens Point, Wisconsin
Mutual Indemnity and Hardware Insurance Company, Home Office, Owatonna, Minnesota
HARDWARE MUTUAL CASUALTY COMPANY
Home Office, Stevens Point, Wisconsin
LICENSED IN EVERY STATE



Hardware Mutuals

Stevens Point, Wis. • Owatonna, Minn. • Offices Coast to Coast

Compensation, Automobile and other lines of non-assessable

CASUALTY AND FIRE INSURANCE

of the various agencies having services available to the veteran. Charts showing the integration of the organizations and how they function are included.

The Result of a Promise

THESE typical "plans" are born of the realization that the citizens of every community have given a tacit promise to every individual entering the armed forces that, on returning from the wars, he will be fitted into the local economy as happily and as profitably as possible.

Naturally, in every community effort, some public-spirited citizen has been the "spark plug" who got the program started. In many instances—such as in Cumberland, Md., Hammond, Ind., Sacramento, Calif., St. Louis, San Diego—the chamber of commerce has spearheaded the planning by financing surveys as to peacetime employment possibilities.

In some places, the chamber has provided office facilities, either in its own headquarters or elsewhere, and, through its own committee members, coordinated the operations of other organizations. The Job Registration Bureau of Watertown, N. Y., with its goal of "A Job For Every Ex-Service Man," is an example. So is the Gateway Bureau of the Minneapolis Civic & Commerce Association which has established a "Soldier's Job Service" that functions as a clearing house for both jobs and men. Many other towns and cities have done likewise.

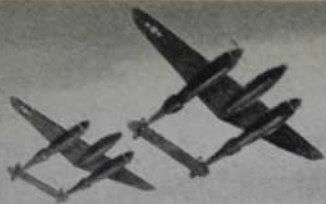
Private Initiative

JUST as the citizen and the community were somewhat ahead of the state and federal governments in realizing the need for rehabilitation and demobilization preparedness, so were private employers ahead of the community. Even before Pearl Harbor, many concerns were making plans for helping employees handle their enlistment problems, in seeing to it that their induction into the armed services, their days of action, and their return to civilian life would not be harassed by economic anxiety for themselves or their loved ones.

General Mills, Inc. at Minneapolis, for example, sent to each of its former employees now serving the nation, a holiday greeting, a note over the signature of Harry A. Bullis, the president, and a small, triple-folded card.

The card carried a message from Bruce Barton—one that gave a lift to the reader—and information on making arrangements for reemployment with the company, for enrollment in extension courses.

Although it deals in pepper and spice, McCormick & Company of Baltimore also believes in dealing in employee relations. Every one of its employees who enters the armed forces is given a substantial wage allowance; urged to keep in touch with the company; and periodically sent a bonus check and a letter from the president, Charles P. McCormick. Additional correspondence from



More power to you!

Look up, son! At those white-starred planes, boring their swift lanes across the sky.

There's a story there for you. About your country. About the kind of place it has been. And is. And can be for you. It goes like this:

We had fighting planes back in 1918 too. Pretty good ones — for their time.

But they weren't as fast and couldn't travel as far because they had only about half as much power per pound of engine.

Even then, General Motors men were puzzling over such things as why engines "knocked" and why we didn't get all the power we should from gasoline.

After long trying, these GM men pried loose the secret of tetra-ethyl lead. Yes, the same, "Ethyl" we see written on gas pumps today. And that unlocked a whole world of developments not only in better motor fuels, but in quieter, more powerful engines in which to use them.

General Motors men would be last to claim all the credit for the plus-powered gasoline our fliers use today. But because they wanted to provide more and better things for more people—in this case, more and quieter power from the average man's car—they opened the

door to the magic of anti-knock compound to increase the power of any gasoline in which it is used.

Now we have the fastest warplanes in the world, in part at least because of peacetime work on automobile engines and fuels.

Such work will continue. Why? Because here in America it has always been worth while for men to tackle hard jobs. They've known they could win a just reward for doing great things.

That's what built the peacetime America we're so proud of. It helped make our country strong in war.

It will again make a wonderful land to live in when lasting Peace has been finally won!

Every Sunday Afternoon—GENERAL MOTORS SYMPHONY OF THE AIR—NBC Network

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"VICTORY IS OUR BUSINESS"

CHEVROLET • PONTIAC • OLDSMOBILE • BUICK • CADILLAC
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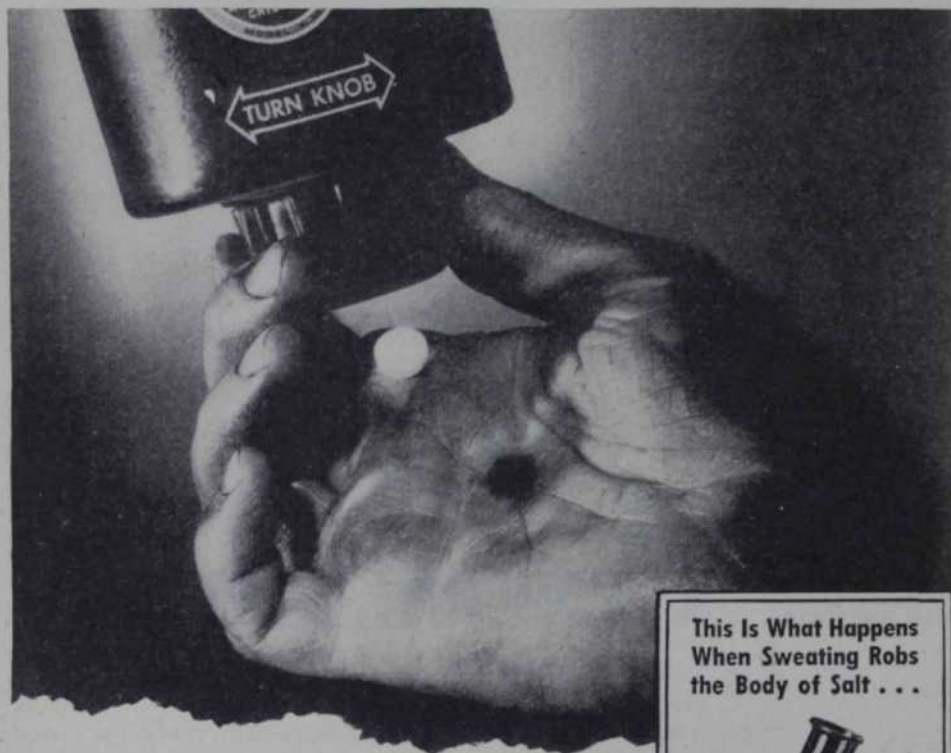
KEEP AMERICA STRONG
Buy War Bonds



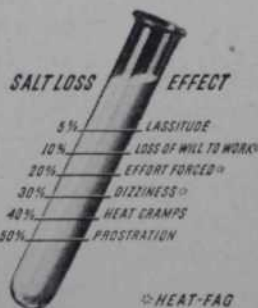
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Need Salt-

Supply it- this easy, simple way for less than 1c a man per week



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When Sweating Robs
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Order from your distributor or directly from this advertisement . . . Write for free folder.



MORTON SALT COMPANY, Chicago 4, Ill.

junior, factory and sales boards, including Christmas gifts and other remembrances, follow at other times of the year.

All of this raises some doubt as to the accuracy of the statement issued last month by Teachers College of Columbia University:

"Local organizations and institutions that will do the actual work of readjusting and re-allocating veterans and war workers are ill-equipped to handle the task."

Actually there are few, if any, large corporations that have not had many years of experience in the rehabilitation and retraining of their own physically handicapped. The war, of course, has created new problems—and more of them. But, drawing on their own experience—and pooling it with the experience of others—many companies have set up

A Job After War

"Sure glad to hear you people are thinking of us and trying to see that we have a job to come back to. A great many times, when the flak gets heavy or the fighters get thick, we wonder just what we are going through all this hell for, but when we get letters like yours, that is our answer right there."

*From a former employee
to Standard Oil (N. J.)*

modern, practical means for the employment of disabled workers—including ex-soldiers.

Such firms as Allis-Chalmers, Caterpillar Tractor, Chrysler, du Pont, Fairbanks-Morse, International Harvester, General Electric, Union Carbide, General Motors, Shell Oil, Westinghouse, U. S. Steel and scores of others, including the larger public utilities and railroads, are well equipped to do this job. Such concerns, with few exceptions, have representatives actively engaged in almost all the local programs.

It is the private employers, more than any other group, who have taken the realistic attitude on the problems of morale building, rehabilitation, job training, job finding and making, and reemployment.

It is the practical business man who realizes that the greater majority of our soldiers are *not* coming back disabled and handicapped. They are coming back in the prime of life, full of vim and ambition.

And that it is during the next five years that these men and women, some 10,000,000 of them, representing the cream of the crop, both mentally and physically, will be seeking a niche in the free economy for which they fought.

WHAT'S DIFFERENT HERE?



This looks like an ordinary nut.

To a certain extent it is. It holds things together, and permits removal just as any good nut should.

But then this nut goes further. It does more.

It locks fast wherever it's put. It won't shiver loose and turn—even under severe vibration.

You can take it off and put it back on many times. It still locks wherever it's left—without any washers or auxiliary parts.

The reason is simple. The elastic locking collar in the top molds itself securely in and around the bolt threads and grips tight.

That makes this nut unusually safe. This is why it is used so freely on structural parts of all America's airplanes. For example, our bombers use as many as 50,000 in a single ship.

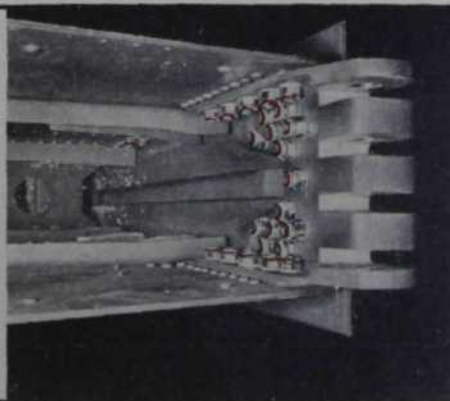
There are more of these self-locking Esna nuts on war material than all other lock nuts combined.

They will be equally important on peacetime products. So when you see this familiar Esna red collar, you'll know your radio, car, household gadgets and all kinds of equipment will be stronger, safer, quieter and free from frequent servicing.



OK'D FOR THE RESPONSIBLE JOBS

You see here one of the most important structural assemblies on the famous P-38 Lightning fighter plane. It is the terminal forging bolted to the center section spar cap. For safety and dependability it is fastened with Elastic Stop Nuts. Altogether there are about 33,000 Elastic Stop Nuts on a P-38.



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Cross-Examining Cartels

(Continued from page 32)

request of the President of the Board of Trade and unanimously adopted by the Grand Council of the Federation April 15, 1942, recommends the formation of a British Empire-American group for the revival of foreign trade and a policy of "directive imports" involving import and export controls and preferential treatment as a part of bilateral trade. Although it does not come out directly in favor of international commodity agreements, it refers approvingly to the "most important function of the trade association movement to provide an organized and authoritative basis on which international industrial agreements can be negotiated with a view to eliminating uneconomic competition and fostering an ordered system of world trade to the advantage of both producers and consumers."

Cooperation in planning

THE second report, by the International Trade Policy Committee of the Federation, issued February 22, 1944, is much more specific on the point of international agreements. It states that "market forces cannot be relied on automatically to establish equilibrium in international trade. The choice is a return to the jungle law of unregulated competition or the adoption of conscious planning to raise that prosperity."

The Committee favors efficient private enterprise as a basis for a prosperous national economy, but suggests a series of international agreements dealing with the main materials entering into international trade. It recognizes the difficulties in the way of international arrangements covering semimanufactured and fully manufactured goods, but it "feels that it should be recommended that industries investigate the problem as affecting their particular interests, with a view to deciding on the desirability and possibility of negotiating international arrangements with similar industries in other countries."

Planning is recognized as essential, with government confining itself to guidance so as to avoid antisocial, wasteful and chaotic conditions. The report recommends the establishment of an International Economic Council on the foundation of the existing collaboration among the United Nations. The function of this Council should be to estimate the needs of, and the possibilities of supplying, the different countries with principal commodities, and to guide that trade in channels where it will most benefit producer and consumer.

The recent report embodying the post-war plans of the British cotton industry includes no recommendation for international agreements, but it demands control of both minimum and maximum prices to be administered by a reconstituted board for the whole industry, a body already provided for by the Cotton Industry (Reorganization) Act of

1939, suspended at the beginning of the war. It is evident that the British economic psychology is adjusting itself to the country's changing economic position.

One of America's chief reasons for opposing cartels is that they deprive the little man of a chance to carry on his business according to his own ideas and in fair competition with his fellow men. Many of the opponents of the cartel in this country might be surprised to learn that certain European countries regard the cartel as a means for protecting the little man. The big combines, by joining a cartel, must allow the weaker members to remain in business under the protection of a remunerative price level or market allocation.

It is true that the large-scale producers do not lose by this arrangement, since they generally get a quota in proportion to their facilities, and, if they produce efficiently, they also get the differential benefit. In some cases the larger producers find it profitable to buy out the little fellows, increase their own quotas and thus utilize their production facilities more fully.

There is no doubt, however, that the small producers in Europe are, as a rule, rather eager to seek the shelter of the cartel. The fact that capital is less abundant and less available to the small producer in the European countries than in the United States helps explain the difference in attitude.

Cartels stabilize values

ANOTHER important consideration is that, as a rule, the European banks participate more directly in shaping industrial policies and naturally favor cartels which offer greater protection for invested capital than free competition.

Another striking illustration of how a country's economic development or psychology affects its attitude toward cartels is provided by some of the recent trends in the United States. For instance, it was quite clear that the release of certain materials for civilian consumption could not be handled on a purely competitive basis, on the principle of first come first served. The same is true of the various suggestions for disposing of surplus war stocks advanced.

As a matter of fact, in one notable instance we have gone a considerable distance in recognizing the fact that, under abnormal conditions caused by political or economic developments over which the producers have no control, a policy of "orderly marketing," which essentially is not so different from a cartel, may be justified. Certain phases of our farm policy, too, show a considerable departure from the free enterprise system, as does our venture in the international field in regard to the marketing of Latin-American coffee in the United States.

The coffee agreement is definitely an international cartel under which the various producing countries were allocated

quotas in our coffee market. The fact that this action was prompted by weighty political and strategic considerations does not modify the character of the agreement, nor does it necessarily make it certain that, after the war, competitive methods of marketing coffee will return. In fact, it is possible that, on the basis of their experience with a partial cartel, the Latin-American countries may desire to take the next step and expand the agreement to cover other coffee markets.

The discussions of commodity agreements for wheat and sugar indicate a similar trend, since there is no essential difference between allocating world markets—or fixing quotas among sugar or wheat producing countries—and doing the same thing with aluminum or rubber. International agreements on postwar shipping and air transportation, with participation on a quota basis, have also been suggested.

In so far as it may be found necessary to retain certain war controls and restrictions during the reconstruction period, it is certain that some countries will look to international cartels as a proper instrument of economic adjustment. We may also safely assume that, with the experience of state intervention during the war and the government participation in the prewar agreements for the marketing of rubber and tin, some of the postwar international cartels may be more than mere arrangements between private producers.

Competing with foreign cartels

THESE developments do not imply that we must change our antitrust policy to keep up with the procession. However, it would be desirable to recognize the basic world trends in attempting to estimate the postwar situation. A policy radically different from which other important countries follow after the war may complicate our foreign economic relations and place our individual exporters and producers at a disadvantage in certain foreign markets.

The whole subject of cartels is too complex to be disposed of on a black and white basis. The question is not whether we want our domestic economy to be dominated by cartels. We have already taken a position on that question.

However, the American business man should be prepared to meet with one assured fact:

After the war he will come in contact with revived international cartels. Furthermore, it is probable that some of the solutions for our own domestic problems in the postwar period will not be based on unadulterated free enterprise. The cartel may not be mentioned, specifically, as a solution for such problems, but some of the plans for mitigating competition may bear a close kinship to that institution.

So let us hope that practical business men will view the problem in a realistic spirit and in its proper relationship. For the present it is sufficient to have a wise understanding of the subject. Future events will shape our opinions and policies.

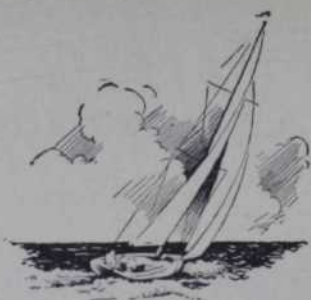


Historic Virginia, mother of presidents, is justly proud of its heritage—and of its commercial progress, too. Today, Virginia's strategic location in the nation's greatest storehouse of raw materials—the South—has made this great state an important factor in our economic life.

Here in Virginia are resources and raw materials in abundance and variety. A land of expanding industry, diversified agriculture and friendly people, Virginia is planning for the post-war years when the Old Dominion will contribute in ever-increasing measure to the building of a greater and more prosperous nation.

The Seaboard Railway is proud of its part in Virginia's past development, for it has been an active partner in the expansion of this State's industry and agriculture. The Seaboard looks forward to the return of peace and to its part in the building of a greater Virginia in the brighter years ahead. Seaboard Railway, Norfolk 10, Virginia.





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Business Can't Escape History

(Continued from page 26)

ments, of telling the truth from them without bias, and of forming judgments in accordance with the best principles one knows are qualities which the entire historical profession holds before itself. Nor can they be dismissed as intentionally unfair, prejudiced individuals who let emotion warp scholarly judgment.

What then is the answer? Why are well-trained and honest historians so grossly one-sided in their judgment?

The answer is a ridiculously simple one. These men have told their story as they have because that is the only story which the documents available to them let them tell.

Business facts are hidden

THE papers of hundreds of Farmers' granges are open to the historian; he can dig up enough letters and statements of the populists to write, as has been done, a full and convincing book; the arguments of the muckrakers are spread in scores of articles and books; the files of congressional investigating committees are heavy with information; the historian can read, and does, the *Congressional Record*, and the debates in state legislatures; he can comb newspapers and journals for 75 years back, from all over the country, if necessary. But he cannot get into the records of a great corporation. They are not open.

If he summons his courage, gets an appointment with a responsible officer of a corporation, and asks permission to examine all the existing documents, the letters of presidents and treasurers, the board minutes, the reports, the day-books, the ledgers, for some period in the past, he may confidently expect one of several replies.

He may be told, as the kindest answer, that the company simply has no records as far back as that. Or the company doesn't know where the records are. They might be in a warehouse somewhere, but they would not be in convenient shape to use.

Or the historian, especially if he is a youngish fellow, may be told on the executive's authority that the documents contain nothing which would be of the slightest use to him, that if he wants a history of the company, he should read the booklet prepared by some employee which contains all essential facts. Whatever answer he gets, the historian is likely to leave with a suspicion that the company has something to hide.

Now what, I wonder, has any company to hide, even one with disreputable incidents in its past, that can call forth stronger language than is already being used? Quotations from current textbooks imply that every man who built or ran a large business was a Dan Drew or Jim Fisk. I don't believe it. For every Drew there were hundreds of reputable

FORCED SALE-

(that only you can stop)

A survey of more than 50,000 estates probated from coast to coast revealed that the "demand cash" needed for taxes, debts and administrative expenses totaled 18% to 54% of the estate. In most cases no more than 25% of the necessary cash had been anticipated and provided in planning for the distribution of the estate.

In such cases, the cash needs must often be satisfied by disposing of the most readily salable assets—often the best securities. That doesn't make anybody happy. That isn't the way it was planned. That isn't the way it needs to be.

Not when liquid funds can be provided so economically through life insurance. Ask a Northwestern Mutual agent to show you the advantages of discounting your estate taxes in advance in easy installments, and how you can sidetrack raids on your estate.

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The booklet "Have You Streamlined Your Estate?" charts typical tax situations of various sizes and kinds of estates. It outlines methods of providing vital liquidity. This booklet will be sent to you without cost or obligation. Just use the inquiry form in the lower right-hand corner.



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WHEN THE COMMAND IS "STACK ARMS!"

WHEN THE DIN of battle has subsided and a calm has settled down over the world—will this be the calm that precedes another storm...

The storm that has so often followed other wars and which has brought despair to the hearts of men, and hunger to their stomachs?

Will the *apple stand* symbolize again, the richness of America's opportunities...?

The answer to these questions depends upon how well Industry, Labor and the people of America unite in protecting the stimulating influences of Free Enterprise, Free Competition and Private Initiative. Upon these depend the speed with which Peacetime production can begin... whether industry and business can absorb millions of men who have "stacked arms."

Today Detroit Tap & Tool Company accuracy is helping clients build war equipment which, for efficiency, is amazing the enemy. Tomorrow it will help these same clients build products of Peace whose efficiency will astound the world... and whose manufacture will create jobs for all.

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business men who scorned to follow his practices. I do not believe that in the 50 years between the Civil and the World Wars, when the growth of corporations dominated the history of America as the frontier dominated the 50 years before the Civil War, the ablest men and the keenest minds in this country, who were found in business, should all have been corrupt, unprincipled and irresponsible.

Among railroad men all over the United States legends cluster about Jim Hill; few or none get into the histories. I don't believe that a ruthless titan inspired memories and devotions like that. I don't believe it, I say, but I cannot prove why.

Good overbalanced bad

GRANTED that the business ethics of the 19th Century were not the same as today, granted that in the severe competition of that time some things were done which no corporation would tolerate now, I believe, if such concepts and facts were made part of the record and balanced or overbalanced by the rest of the facts, that the resulting overall impression would differ so much from the one existing today that it would not be recognized as the same one.

I believe that, I say, but I cannot prove it.

Corporations should place confidence in historians, not necessarily in any man who calls himself a historian, but in those trained in a rigid school and adhering to the rules and standards of their profession. This is not a suggestion that corporations hire historians to write up their histories; the good historian is not for sale, and any book written under such conditions would carry no more weight among reputable historians than a statement issued by any organization believed to be prejudiced.

Such statements are read and accepted only by the members of the organization itself; however accurate, however sound they may be, they issue from a source regarded as not disinterested and therefore are discounted even before they are read.

A historian cannot be hired; if he is interested in corporation documents at all, it is because he wants to find out exactly what happened, and to write a book about it, a book which will enhance his own position and standing among his colleagues in the scholarly world. Like the reputation of a firm of auditors, or a good doctor, a historian's reputation depends upon his intellectual integrity and scrupulous impartiality. He is equally jealous of it.

I propose, therefore, that corporation executives consider seriously the making available to historians of documents in their possession which are no longer alive. That entails, on a firm's part, the assembling together of papers which are likely to be scattered and the depositing of them in, or the presenting of them outright, if no legal barrier prevents, to some institution where scholarly research is carried on.

Such safeguards as are customary in all responsible libraries can be imposed,

that no unqualified person is permitted access and that qualification, among other things, means the acceptance by the librarian or department in charge of a comprehensive plan of research. The essential point in such an arrangement is that the men who have the chief responsibility in determining qualification are men who will apply the normal and accepted standards of the historical profession itself.

This is the understanding under which one railroad has recently deposited its 19th century central office papers in the Newberry Library. That act has caused wide and favorable comment from historians all over the country, and has already, though research cannot be begun until the papers are classified and made ready, done something, I believe, to correct the impression that corporations are afraid to have a true history of their past written.

There are instances in the past where convictions about men who exercised great power have resulted in a shifting of that power to other hands, either by constitutional means where those were available, or by force where they were not. Interesting and pertinent parallels can be drawn between the modern group of corporation managers and the feudal aristocracy of Europe, or the ranking officials of the medieval church, or the commercial princes of Venice, or the patrician class of ancient Rome.

Power and responsibility

THE members of each of these earlier groups had great economic power, were bound together by "mutual loyalties and common interests," recognized a set of customs of their own in their dealings with one another which carried an almost legal sanction, and exercised a kind of jurisdiction, outside the sphere of law, over certain aspects of the lives of men who served them.

These are likewise characteristics of modern managers. Some of these groups were unaware of the nature or power of the convictions which people had about them; others, sensing those convictions, summoning every resource to correct them and deliberately accepting a larger degree of responsibility for the public welfare, survived.

Remembering this, can anyone studying legislative enactments in recent years reasonably expect these enactments to come to an end if attitudes such as I have described continue to be politically expressed and if government continues to reflect the assumption that a business man, simply because he is a business man, is totally unconcerned with the national welfare?

The answer to the question: What is the judgment of history on American Business? is still before the court. The evidence is not all in. If the final answer is to be a fair one, and have the kind of effect on public opinion which undistorted answers eventually have, business itself must help make it and in the spirit and through the agencies I have suggested.

Business should not let this judgment go by default.

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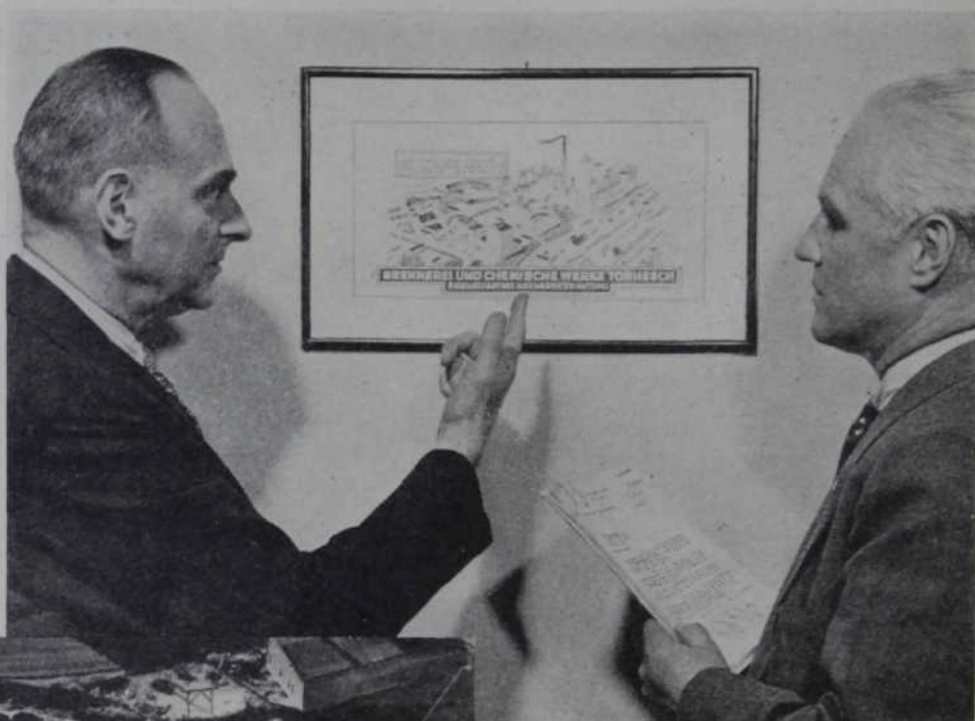
Main Office — Seattle
Spokane and Eastern Division — Spokane

Chemistry on a Sawdust Trail

By LARSTON D. FARRAR

KICKED OUT by Hitler, this business man is building a new industry here to help speed Germany's defeat

AMERICAN chemistry has literally hit the sawdust trail through the efforts of the organized lumber industry. The results may lead to utilization of some 25,000,000 tons of mill waste each year and better living for all Americans.



"This was our plant," Erwin Schaefer tells Wilson Compton, head of Timber Engineering Co.



A 20,000-ton mountain of sawdust from one lumber mill—enough material to make a million gallons of alcohol

From mill waste—lumber scraps and sawdust—can be made wood sugar, alcohol, phenols, plastics, proteins and baking yeast. If the sawdust trail should help bring about an early victory, Americans may, paradoxically, thank Adolf Hitler. His contribution was unintentional.

One day early in 1939, Gestapo agents visited a concentration camp near Berlin. They called for Herr Erwin Schaefer, lately head of *Brennerei und*

Chemische Werke Tornesch—the Tornesch Distilling and Chemical Works located at Tornesch, industrial suburb of Hamburg, then a bustling center of German "defense" work.

He came into the office of the commandant.

"Herr Schaefer," said the Gestapo leader, "I have here an agreement for you to sign. It provides that you are never to enter your plant again, that you are willing to accept a fair price for

your properties, and that you will absent yourself from the German Reich."

Each of the terms represented a bitter pill for the pale industrialist. The plant he could never visit again had been built by his father and represented his own life's work. The "fair" price offered meant nothing, because he could take no more than \$250 from the country. Leaving Germany meant leaving a country for which his parents and grandparents had worked and fought. He signed.

Traded away management

SEVERAL days later his father and partners signed the same agreement.

Thus Hitler traded away the management and brains of a great German chemical industry in return for legal title to the plant itself—which he already controlled.

Today, Adolf has the plant and the U. S. has Herr Schaefer, who is helping write an American sequel to the story of Germany's *Universal-rohstoff*, or universal raw material, which is wood. He brought with him a process by means of which sawdust and other mill waste can be used economically to make sugar.

Manufacture of sugar from wood began in chemical laboratories early in the

America's cars and trucks are "war workers" too, and registrations show

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19th Century. It reached serious industrial experimentation in World War I, when, as now, industrial alcohol was high on the list of critical materials and every warring nation was seeking new sources of supply. Germany, Great Britain and the United States, the most highly industrialized nations, have led in the demand for more and more alcohol.

The first American chapter was written in World War I by the U. S. Forest Products Laboratory at Madison, Wis., which developed a process to convert the cellulose of wood into a glucose-type sugar.

Abundant raw material

CHEMISTS in those days were spurred by the knowledge that the United States possessed—and possesses—abundant raw material. Every sawmill (and there are more than 25,000) accumulates a pile of sawdust. Every logger leaves behind debris of boughs, "slash," and other parts of trees which create serious fire hazards until burned under supervision.

Theoretically, this waste could be processed into 10,000,000 tons of wood sugar, which, in turn, could yield more than 1,000,000,000 gallons of alcohol. The nation's entire needs for 1944 are only 640,000,000 gallons, which we will have trouble producing.

Using the so-called "American" process developed at Madison, we produced considerable wood sugar during and immediately after World War I, but the method proved inefficient and as soon as blackstrap molasses became available in quantity again, wood sugar enterprises folded.

At this point, the German chapter began. It unfolded largely at *Brennerei und Chemische Werke Tornesch* where, in 1882, Richard Schaefer entered business for himself and built himself a name as well as a town. Later, into the business came his son, Erwin; his son-in-law, Oscar Loeser; and a close friend, Carl Levy. Of no industrial or chemical importance at that time was the fact that they had "non-Aryan" blood.

The Tornesch works produced alcohol and baking yeast from grain and sugar beets, and prospered. Constantly, its chemists sought new and more abundant raw materials, because Germany had no such quantities of grain and molasses as America. That was why Herr Schaefer, the younger, was more than casually interested when, in 1926, an unknown young chemist, Heinrich Scholler, came to his office and—before his eyes—converted ten grams of sawdust into a sugar solution with no apparatus except a small tube and some dilute acid.

Dr. Scholler was in the tradition of German science. A poor man, he worked in a state-owned laboratory. He had conceived his entire process in theory, and actually patented it before he made laboratory tests.

The Schaefers decided to risk 100,000 marks in continuing his experiments. Before they were through, they had spent 3,000,000 but, instead of 16 gallons of alcohol from a ton of sawdust (the top amount obtained through other

processes) they could produce 60. That changed the alcohol picture considerably. Wood now became an economical raw material for alcohol production.

This discovery impressed German industrialists. For years after 1918, Germany had studied the reasons for her defeat. The economic high command had given much thought to a treatise written by the highest ranking civilian official in the *Kriegsministerium*, or war department, Ernest Pieszcsek. He advanced the theory that failure to organize food supplies, both for human beings and livestock, had cost Germany the victory. He blamed the whole 1918 catastrophe on lack of proteins.

The Scholler-Schaefer process, by this reasoning, provided a new and relatively limitless source for one thing that all Germany lacked.

Erwin Schaefer determined to devote his entire plant to wood sugar production.

Sugar and alcohol

THE permit held by the Tornesch plant gave it the right to make alcohol from molasses and grain but not from wood sugar. Determined to seek a huge new quota, based on the new process, young Schaefer went to Berlin with the words of his father, who knew better, ringing in his ears:

"My dear, crazy son."

But the elder Schaefer had underrated the impression Ernest Pieszcsek's findings had made on German military and industrial minds. The elderly chief of the Alcohol Monopoly, remembering abortive attempts to make wood sugar during World War I, told young Schaefer not to waste his time unless he could prove alcohol production of 50 to 60 gallons per ton of wood-waste.

"That is why I am here," Schaefer said, explaining the results of his large-scale tests.

The official insisted on an immediate trip to Tornesch where he satisfied himself of the facts. In the record time of three weeks, a new quota was granted and a new company formed, chiefly to make feeding yeast to supply the proteins on which many Germans blamed their previous defeat. The head of the monopoly became president of the new concern, owned half by the Schaefers and half by the German Government.

"Which proved fatal," Schaefer says today.

That was in 1932. Hitler came into power the next year. The Scholler-Schaefer process gained wide acceptance. More than 20 such plants are estimated to have been operating in Germany in 1941. Three were built in Italy and another in Switzerland. The Japanese built one in Manchukuo and one in Korea.

But soon after Hitler came to power, a company representative was summoned to the chancellery in Berlin where he was warned by William Keppler, personal adviser to the Fuehrer himself, that the presence of men of Jewish blood would not be tolerated in a governmental partnership.

The climax was well staged. The

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notorious purge, when Roehm and other leaders were liquidated, was on June 30, 1934. On that same day, a company official was again on Keppler's carpet. Heinrich Himmler was there, too.

Keppler made himself plain. Schaefer and any other with the non-Aryan "taint" must be ousted in three days.

The board of directors surrendered, and Schaefer, no longer a director, continued to occupy his offices, from which he directed his other interests. But his security was brief. On November 10, 1938, Von Rath of the German embassy in Paris, was slain by a Polish Jew.

When Schaefer and his partners got off the train at Tornesch that day (they all lived in Hamburg), two of their own employees who were high in local Nazi Party circles, arrested them and led them to the town jail. Ironically, they had given that jail to the little one-industry town as a community contribution several weeks before.

"I believe we were the first to occupy it," says Schaefer.

From jail, they went to the concentration camp.

In March, 1939, Schaefer, his aging father and mother, his wife and three children, and his two partners, arrived in England. Not until July, 1940, was he able to come to the United States under an immigration quota.

Immediately after coming to this country, Schaefer was instrumental in organizing the American Wood Sugar Company, becoming its vice president, but, discouraged by official indifference, he halted this enterprise.

Speeding up the process

FINALLY, employed as a consultant by the Timber Engineering Company, affiliate of the National Lumber Manufacturers Association, he was able to interest the Office of Production Research and Development in the process. Since then, under the general supervision of Dr. J. A. Hall, chief bio-chemist of the U. S. Forest Service, pilot plant tests of Schaefer's process have been made at Marquette, Mich., using facilities lent by the Cliffs Dow Chemical Company. The cycle of the process has been shortened from 18 hours to about five hours.

Now, the Willamette Valley Wood Chemical Company has been formed and is seeking permission to build America's newest wood sugar plant at Springfield, Oregon. Other projects are in the making.

Wood sugar opens a new vista to those who have never considered the chemical possibilities of the new age of wood. There are those who now believe that many forest industries which heretofore have always dealt with wood *mechanically* may turn also to chemistry. Wilson Compton, president of the Timber Engineering Company, said recently:

"The history of the American lumber industry has been written with a sharp saw. Its future may be written with a test tube."

If so, a German refugee's name will be hailed in his adopted land where he works to defeat the man who stole his fatherland.

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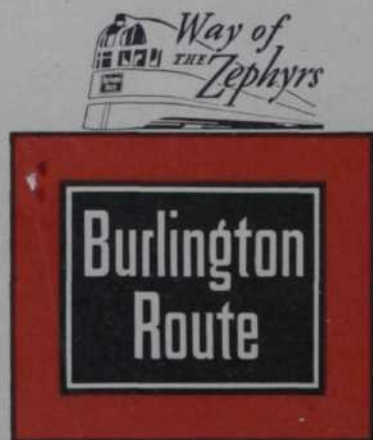
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AN ESSENTIAL LINK IN TRANSCONTINENTAL TRANSPORTATION

General Hurley, Roving Envoy

(Continued from page 24)

trip was a gesture of good will to discuss the country's ambitions and problems.

He was in Kabul for six days, having audiences with King Mohammed Zahir and conferring with his officials. Though a previous king, who ventured on a trip to foreign capitals, was deposed when he returned with new ideas, the present king is determined to modernize Afghanistan. For that he wants the help of the United States which will not interfere in national politics—the same old reason.

Finds confidence in U. S.

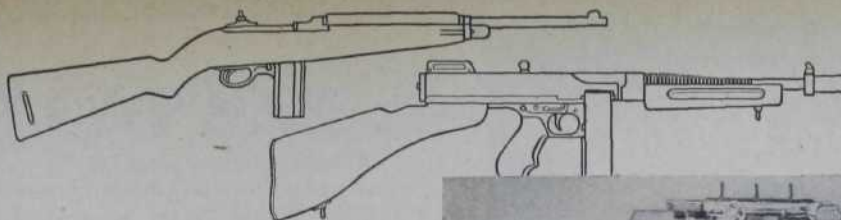
GENERAL Hurley's busy months have been filled with thousands of miles of flying to many countries with differing forms of government, different races, different creeds and different social customs, on opposite sides of the world as the miles are measured. From each of them he has returned with the same impression of friendliness and confidence in the United States, the substantial and unselfish help we are giving them in this war and the opportunity to make it a permanent foundation of good will toward the United States. He feels that, as equals in the fight for victory, each nation is entitled to the credit for its part. The American share is large but its demand is modest and just.

"Our economic system was evolved by those pioneers who conquered a raw continent and established not only a free government but free enterprise," he says. "It has inequalities and cruelties which should be eliminated but we should perfect that system rather than accept some half-baked economic theory in its place.

"Human nature is not perfect and therefore does not create perfect institutions but the free American state and free enterprise have for more than 160 years sustained freedom of conscience, freedom of speech, freedom of press, the right of free assembly, equality of opportunity and a fair administration of justice. It has built the greatest school system on earth, sustained the highest standard of living, created the most prosperous nation and has given more happiness for a greater period of time than any other nation that ever existed.

"It should be our purpose to assist other lands to achieve for themselves the blessings which we enjoy, raise their living standards, not lower ours; cooperate with them, not give stultifying charity; and enter into no commitments that will infringe on our sovereignty or surrender any of the principles that make us a free, prosperous and happy nation.

"The more I see of other nations, the more I am convinced that our political system, our way of life are the best in the world."



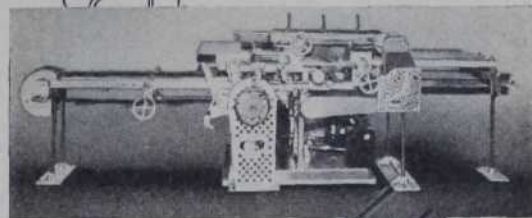
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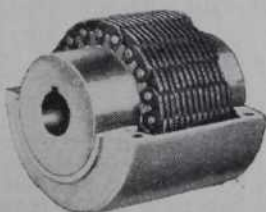


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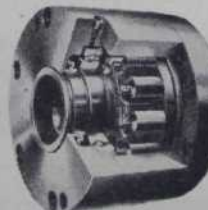
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We're Crying Wolf in Oil Again

(Continued from page 34)

they were predictions of government authorities, the same official voice which warns us today that "the end is in sight."

Unfortunately no one knows how much oil remains to be found in the United States. We do know, however, what the experience of the American industry in searching for oil in the past has been, and it is enlightening to attempt to project this into the future.

One factor in our past experience has always been the amount of our proved reserve; that is, the amount of oil we have found and developed and measured, but have not yet brought to the surface.

On the amount of our proved reserves today there is general agreement. Everybody accepts the estimates published annually for the past ten years by the American Petroleum Institute. These estimates place our present proved reserves at a little more than 20,000,000,000 barrels, a level which we attained for the first time at the end of 1942. Our proved reserves rose to this peak gradually; they were estimated in 1926 at 4,500,000,000 barrels; in 1936 at about 13,000,000,000 barrels.

Another important factor in our past experience is the rate at which we have added to our proved reserves each year by new discoveries. On this subject again there is general agreement; our oil-finding experience in recent years is not as good as it was 15 years ago. Opinions differ, however, as to the reason.

The alarmists believe that it is due to the imminent exhaustion of our oil resources.

Oil producers, on the other hand, believe that the slump results principally from the inadequacy of our recent search. The chronic condition of over-

supply and low crude-oil prices, which have prevailed since the beginning of the depression in 1929, have sapped the vigor of the oil-finding enterprise.

Alarmists see oil shortage

BUT the most pronounced disagreement over the adequacy of our oil resources centers today, as in the past, on the question of how much oil remains to be discovered. The alarmists contend that our proved reserves constitute practically our total resources. Since these total only 20,000,000,000 barrels, and, since we consumed 1,400,000,000 barrels during our last peacetime year, we shall be short of oil for our motors within 14 years.

Oil producers believe, on the contrary, that our undiscovered oil resources are still far greater than our proved reserves. Let us examine this question.

We have learned that there is an area of about 1,500,000 square miles (opinions vary from about 1,100,000 to about 1,700,000) in this country where it is reasonable to believe that hidden oil fields exist. We know from experience that, where our drilling exploration is definitive, about one per cent, on the average, of the total area tested proves productive of oil. In first class territory this ranges up to three per cent.

If one per cent of our total hunting ground should finally prove productive, we should eventually develop some 15,000 square miles of producing oil fields in the United States. So far we have found only about 8,000 square miles—about half as much as we should ultimately develop.

Since the past production plus the proved reserve on this 8,000 square miles

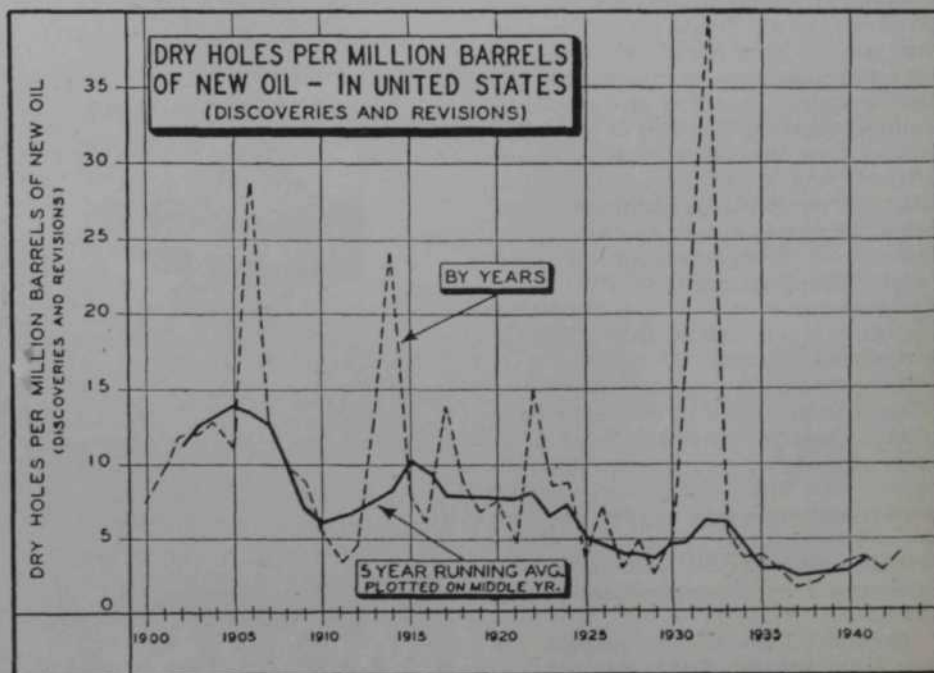


FIGURE 2

totals about 48,000,000,000 barrels, and since the larger part of our most promising territory is still not completely explored, it is reasonable to expect that the oil remaining to be found exceeds our present proved reserves.

In the past our proved reserves have constituted only a minor part of our total future expectancy in oil. In 1922 the joint committee of the United States Geological Survey and the American Association of Petroleum Geologists estimated our proved reserves at 5,000,000,000 barrels. Since 1922 we have produced 21,500,000,000 barrels and now have 20,000,000,000 barrels in proved reserve. So our undiscovered resources in 1922 must have been at least 36,500,000,000 barrels, or more than seven times the proved reserves at that date.

Since 1926, when the Federal Oil Conservation Board estimated our proved reserves at 4,500,000,000 barrels, we have produced 19,000,000,000 barrels of oil and have built our proved reserves up to 20,000,000,000 barrels, or 7.5 times more than the proved reserves.

Similarly we have already produced since 1932 more than the amount of the proved reserves in that year—10,000,000,000 barrels—as determined by the Federal Oil Conservation Board, and now have in proved reserve twice as much oil as we had then.

Much oil is yet to be found

THESE statistics make it clear that uniformly in the past our proved reserves, as we estimated them at the time, have constituted only a small fraction of the oil remaining to be found.

In terms of years' supply our proved reserves have also often been smaller in the past than they now are; compare the estimate of six years' supply in 1926 with our present 14 years' supply. We were far worse off 20 years ago than we are today. To determine the cause for the slump in the rate at which we have been discovering new oil reserves in recent years, let us again examine our past experience.

We have found our oil in this country, in the last analysis, by drilling wells until we penetrated the oil-bearing rocks. I have been a geologist all my life and I should like to think that geologists find our oil for us. But I must concede that it is the driller who actually finds the oil.

As is shown in Figure 1 on page 34, we have drilled thousands of exploratory wells every year for more than a generation in this country in search for oil. Most of our exploratory wells fail to find oil; we call them dry holes. The more energetic our search for oil, the more wells we drill that fail to produce oil.

Since the earliest days of the industry, we have kept a record of the number of dry holes drilled year by year, and this record is the best index we have of the tempo of our activity in oil-finding. Figure 1 shows we have drilled fewer dry holes in recent years than in the 1920's. We searched more energetically for oil then than we do now.

About 1935, we began to segregate from other exploratory wells a special class, designated as wildcats. Wildcats are wells drilled in search for new oil

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fields, as contrasted with other exploratory wells drilled in an attempt to extend the boundaries of old fields. No one knows how many wildcat wells we drilled before 1935 because we kept no record. The record since 1935, shown on Figure 1, is still imperfect but it becomes more complete each year.

It is a mistake to assume, however, as many of us have done, that exploration consists only of drilling wildcat wells. Since 1936 four times as much oil has been added to our proved reserve — through revisions and extensions of existing reserves by exploratory drilling around producing oil fields — as was discovered by wildcat wells.

Wildcats are more successful

IT IS also a mistake to conclude that, because so little oil remains to be discovered, a larger proportion of our wildcat wells must fail today than failed five years ago. The percentage of successful completions among wildcat wells was higher in 1943 than in any previous year on record. Over the three-year period, 1941-43, our successes averaged 17 per cent against an average of 13 per cent for the preceding three years.

The inadequacy of our present exploratory effort is reflected clearly in the records of the oil industry in the two World Wars. We entered the first World War with a quickened activity in oil-finding. The number of dry holes increased from 7,200 in the last two pre-war years, 1912-13, to 10,500 in the two war years, 1917-18. In the first two years of the present war, 1942-43, we drilled only 11,800 dry holes, as against 12,500 in the pre-war years, 1937-38. Our effort to find oil is only 12 per cent greater today than it was in the first World War, although our oil needs have multiplied fourfold.

Figure 2 on page 90, which shows the number of dry holes drilled per million barrels of oil added to proved reserves each year since 1899, reveals that our effort to find oil, measured by the number of failures drilled in our search per barrel of oil added to our proved reserves, has declined over the years. On this basis our recent finding effort is less than half as vigorous as the effort we put forth at the end of the last war.

If we were now approaching the exhaustion of our oil resources, as alarmists declare, the number of wells required to add a barrel of oil to our proved reserves ought to mount sharply. But the record reveals a general decline in the drilling required. If there has been a slight increase since 1937, it is no sharper or greater than several previous, similar increases and is not alarming.

The significant fact is that the search we have been put to in recent years to add a barrel of oil to our proved reserves involves the drilling of fewer dry holes than it did 20 years ago.

In summary, it may be said that, although no one can measure accurately the future oil resources of the United States, there is no evidence that our present proved reserves constitute all, or even the principal part, of total remaining resources. It is doubtless true

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that we shall some day exhaust our oil resources unless before that day we discover a better or cheaper source of energy, but the end is not yet in sight.

Our proved reserves are large but undiscovered oil fields still constitute our greatest oil resource.

In addition to our domestic oil resources we have adjacent to us in this hemisphere two of the most promising regions on earth for oil resources, the lands surrounding the Gulf of Mexico and the Caribbean Sea, and the lands surrounding the Arctic Sea. Both these regions are marked by great seepages of oil at the surface. In neither region have the oil resources been fully explored.

Little exploration to south

IN THE Caribbean region the development of Venezuela and Colombia is only well begun. Peru, Ecuador and Brazil have great areas of first-class promise where no testing has been done. Mexico, which was once the second oil-producing nation of the world, hardly supplies her own needs today and almost no exploration has been undertaken there in ten years. Yet the potential oil resources of Mexico are on a par with those of Texas, the proved reserves of which are 20 times greater than those of Mexico.

In 1938 the Mexican Government organized a monopoly in oil and took over important producing properties from American and British citizens who had pioneered in the development of Mexican oil resources for over 30 years. The same "open door" we have always sought to maintain over the rest of the world should be advantageous to Mexico as well as to other nations, and the best interests of both Mexico and the United States would be served if American oil companies were again free to help Mexico develop her vast potentialities in oil.

A truly Good Neighbor Policy between this country and Mexico would come in time to envisage great imports of oil into this country from tremendous new oil reserves still undiscovered in that

country. Mexico, together with other Latin American countries, would take reciprocal exports from this country and would welcome American engineering talent and financial resources to assist in the formidable task of converting vast tropical wastelands into healthful, productive oil fields.

Our stake in the oil resources of the Arctic region is Alaska. Near Point Barrow on the Arctic Coast are copious oil seepages, comparable to those of Mexico and Venezuela. It is a remarkable circumstance in view of our recurrent fears of oil shortage that this region has never been explored. The vicinity of Point Barrow in northernmost Alaska over an area of 35,000 square miles, was set aside 20 years ago as a Naval Reserve, but no wells have ever been drilled there.

The balance of the promising area along the Arctic Coast of Alaska, an area much larger than the Naval Reserve, is administered by the Secretary of the Interior. No drilling exploration has ever been undertaken either.

Alaska has other large areas, promising for oil, in which but little drilling has been carried out.

We have spoken so far only of crude oil or petroleum in its natural state in the earth's crust. But our future supplies of oil are by no means limited to crude oil. The chemists tell us that new processes to produce oil from oil shale and from coal, both of which exist in the United States in enormous quantities, await only their turn in economic development. When the day comes that our low grade coals are converted into oil, conservative estimates indicate that this country could supply synthetic oil at our present rate of consumption for not less than 1,000 years to come.

But, ignoring synthetic oil, the natural oil resources available to Americans within our own borders and conveniently placed in adjacent lands are so promising—in the light of our past experience—that no one in the oil industry can take seriously the cry that "the end is in sight."

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What's the Olympian "in the hole" for, Bill?

CONDUCTOR BILL can't talk about his railroad orders in wartime—even to such an old friend of the line as Monty Miller, foreman of the Angle D ranch.

It may be the famous, electrified Olympian has gone "in the hole"—which is railroaders' for waiting on a side track—because it's more important for a military train to have right of way.

Station agents, conductors, brakemen,

and other railroad men don't like to appear unobliging—but they've pledged themselves for the duration to give no information to anyone about unusual train movements.

That's in the interest of national security. An idle word dropped about a troop train—or a supply train's schedule and destination—might reach enemy ears and lead to sabotage or an attack on a

convoy days and even weeks afterward.

For the most part, passengers realize this situation. They too, keep mum about war traffic they see on the railroad.

If the Olympian, the Hiawathas, the Pioneer Limited or other heavily traveled trains happen to be delayed, there is little complaining among passengers. For this understanding attitude, we of The Milwaukee Road, are deeply grateful.

CHICAGO MILWAUKEE ST. PAUL AND PACIFIC

ELECTRIFIED OVER THE ROCKIES TO THE SEA

★

THE MILWAUKEE ROAD

★

Capital Scenes... and What's Behind Them



Shadow of an event

"IT LOOKS," said the Senator, "as though we might have to dunk Col. Louis Johnson right in the tub, if he don't come clean through other and less abrasive processes. And, if we do, we will have tears in our eyes. The Colonel was a good soldier in the First War. Before he was mustered out, he wrote a memo to the Headquarters Staff which was the equivalent of a scrub with a steel brush. It was the hottest criticism that was ever buried in burglarproof files at the War Department. No one has ever seen it yet except maybe a few old soldiers who were tough enough to take it."

Later on President Roosevelt made him Assistant Secretary of War and Colonel Johnson worked like a mine mule on the Industrial Mobilization Plan, which was to have swung Industry into action at the first sign of another war. What with this and that Colonel Johnson had resigned his position before the war actually broke and the Plan was thrown into the waste basket.

"It was a pity," said the Senator. "The Plan was good, but maybe it kind of lacked political appeal. It would have saved us a lot of money and time. Johnson was right sore about it."

"Dear Louis" sent to India

THE Senator said he wouldn't go so far as to say that Colonel Johnson was sent to India as a special representative of



the President to soothe him down. Anyhow, the Colonel went to India, and the British gave him a semi-royal run-around. They—metaphorically—gave him elephants to ride and the how-

dahs were solid gold trimmed in rubies, but they called out the Gurkhas whenever the Colonel got anywhere near the files. They did not want Johnson to know what was going on.

But he found out, and came back and wrote a report which was at once labelled "highly inflammable" and has never been seen since.

"We've got a right to know what was in it," said the Senator. "We can summon him if we want to. I think we're going to want to."

Just supposing a case

LACKING any really first-rate information—"because after getting along pretty well for 150 years it seems now we

are not to be trusted with some of the facts of our national life"—it seems to some members of the Senate that an unpleasant angle might develop in India.

"Just supposing that, while Lord Mountbatten is fighting the Japs, a rebellion were to break out behind his back in India and American soldiers had to go in to help put it down. We'd have to do it. We could not run out on our ally. But, in the meantime, we could use those troops somewhere else, maybe. The Army says it must have 1,000,000 more men. And the bottom of our manpower barrel will be polished like a bone."

We'd know more about just what it is we'll have to do and why we'll have to do whatever it is, he said, if we could lay our hands on Johnson's report.

This isn't scare-y talk

HE WISHES to point out that an honest exposition of all the facts is now possible because we are winning.

"If we were losing this war there might be a good argument for hiding the truth. But we're getting the top hold at last. There will be setbacks, of course. We will lose battles now and then. When that European invasion really starts, the death roll may be appalling. Our people can take it if they do not get the idea they are being kidded."

Most of our 135,000,000 think we are fighting to save the United States. It would be mighty unfortunate if they got the idea that they are just paying the lodge dues, and that some queer stuff was being pulled in the Inner Temple.

Those business operations

WHEREVER you go, he said, you hear talk of war-business transactions in which other nations figure and in which we are getting the worst of it by a sea mile.

"If we get that situation cleaned up now," he said, "we stand a good chance of continuing to be friends after the war. But if we get it into our heads that we are being trimmed, and after the war the Uncle Shylock chorus starts again, then when the Third War comes we might not be so easy."

The heck of it is, in the opinion of his friends in the committee rooms, that we will need friends in the Third War as much as Britain and Russia needed us in the Second War. He thinks that, if the three of us get together now in talking

turkey, there will be less chance of misunderstandings later.

Congress may take a hand

"YOU may not believe it," said the Senator, "but Congress really does not wish to ball up international relations by com-



mittee action of any kind. In the cloak rooms there is full recognition that these matters are entirely within the executive sphere of action:

"But Congress will insist on knowing a little more of what is going on."

One reason why Stettinius went to London was to find out what the European Advisory Committee is doing. It is presumed to be drafting terms for an armistice. But Washington stands pat on unconditional surrender. Washington has its own ideas about Germany's post-war limits, which may run counter to those of Russia and Britain. There are easily a dozen prewar instances of more or less important friction that may have to be ironed out:

"As Congress sees it, our people want to get the job over and get the boys home. They do not want to get into a forever-and-ever entanglement in power politics."

The Indians did it first

"I KEEP THINKING," said the Senator, "that our American form of Democracy traces closer to the Iroquois than to the Magna Charta. The Indians used to perform in a parliamentary way about the same as we do. We sit around in our wigwams, muttering to each other and smoking the pipe. By and by we—Congressmen—get so we understand each other and then the braves go out and throw hatchets at the war-post and yell."

"Like this matter of a revival of states' rights. For a decade or two the federal Government has been crowding closer and closer to the cook fire and us poor men from the states have been getting shoved back into the darkness."

Then, said the Senator, the poll-tax fuss began to run on like "Life With Father." The debate turned on the rights of the states to think and legislate for themselves. We had been unknowingly headed toward a government by departments, as France used to be. There had been talk of nine regional areas in which the state governments would be submerged. Little by little the state pride which had been stamped down revived. The final touch was when Congress refused to turn soldier voting over to the federal Government and retained state control. There will be more of it.



The independent state of TVA

THE happenings in the TVA offer another proof. The TVA had become an

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DEPT. N
**SAN JOSE CHAMBER OF
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The population
center of the
Pacific Coast

independent state superimposed on seven states of the constitutional variety. It was practically free of control. When it felt like flooding some more farmland it went ahead and flooded. Its revenues went into a revolving fund, and it submitted only to a kind of synthetic audit.

"Then the proposition was made in Congress to compel the TVA to turn its annual net into the Treasury and depend on appropriations from Congress for its carry-on."

States' rights again.

Some mills grind slowly

"THERE ARE," he said, "50-odd corporations which have all sorts of liberties. Some can go freely into debt, some are financially responsible to no one but themselves, but all are alive because Congress breathed life into them. Secretary of Commerce and Practically-Everything-Else Jesse Jones has

so many of them in his keeping that it is doubtful if he can remember all the names.

"Don't forget that we have been moving slowly toward federal control of almost everything for 20 years. Now we are moving back again. The wheel turns."

Decentralization is another name for states' rights.

Heard in the cloak rooms

THESE long term movements have their origin in the local Chambers of Commerce and Rotary Clubs and Early Birds' Breakfasts, and people begin to write letters to their congressmen and the congressmen talk with each other in the committee rooms and someone suggests something on the floor and it flops around a while and gasps itself to death:

"But if there is anything worth while in whatever the idea may be it comes to life again."

People who throw rocks at the congressional windows fail to realize that a democracy must work that way.

"It wouldn't do for us to get all steamed up and do something drastic overnight. Maybe there are more errors than hits in the final score. But there are hits. And democracy isn't like baseball in one respect. We can play the game over and get a new score."

Merit in slow motion

"UP ON Capitol Hill," said the Senator, "we make our mistakes when we go too fast. And there's a power of sanity in plenty of talk. Like this International Bank business—"

Congress doesn't know much about the plans for an International Bank. So far as it can make out what Will White of the Treasury and Lord Keynes of England have in their minds, the scheme is more or less to underwrite the financial systems of the various United Nations so that trade will prosper after the war.

That means a return to a gold basis—

"You and I know we never really got off a gold basis. We just kind of levitated ourselves like magicians do with their stoges. But the solid stage is under the stogie all the time."

The White-Keynes plans seem to be alike in that most of the gold for the underwriting will be our gold. Maybe all of it. The idea needs more talk.

There's a tough war ahead

A GOOD deal of military gossip reaches the Senate through its various contacts and is shared in the committee rooms:

"Victory in Europe in 1945 seems a reasonable prospect. A negotiated peace would be a licking for our side."

We are just beginning to get our teeth in this business of war. Some real privations may be expected at home during 1944, because the manpower shortage will make itself felt.

The fighting in Italy has sobered us into a realization that the European war cannot be won by any short cut through the air. In the Pacific the end will come when and not until our Navy has smashed the Jap fleet.



Health of the President

UNDER ordinary conditions the Senator would not worry about the President's health:

"The man comes back from a little dash of illness like a rubber ball."

But a correspondent told of the huge pile of documents on the Presidential desk during a press conference. That is something new. The reasonable presumption is that every paper had to do with something vitally important to all of us. He has been compelled to delegate much of the work he once did joyously, but policy decisions may be delayed because of his slackening strength.

That hard face toward De Gaulle

THE GOSSIP that reaches us—"we are not being informed on international diplomacy"—is that both Russia and Britain deprecate the unyielding White House attitude toward De Gaulle and his French National Committee:

"No reason has been assigned for it. It is possible—this is only a suggestion—that it traces to that proposed visit of De Gaulle months ago and which was quietly cancelled. Something De Gaulle said or did at that time may have piqued the President."

"The bright spot in the situation," said the Senator, "is that these sour notes serve to emphasize the fact that we are winning the war. Allies cannot afford to squabble when they are losing."

Herbert Corey

"BEAR DOWN, MISTER... BEAR DOWN!"

I don't have to look at her . . .

I don't have to watch my ship die . . .

All my life long I'll see her in my mind's eye . . .

And always I'll hear the high, faint roar of planes circling . . . circling . . . circling . . . as their gas runs low and they've nowhere to go and the guys at the sticks look down on their ship and tears spill over the lids of their eyes and they stiffen their lips.

Ever lose your ship, Mister?

Ever lose your mother?

Ever lose your girl?

Your heart cracks and the weight on your back seems to push you under and you think you'll drown but you don't. You carry on, not for yourself but for the rest of the folks . . . for the family . . . the kids . . . for guys like these swimming around, circling around with night coming on and no ship to come home to and around and below only the empty sea.

But we don't want pity!

We'll come through! . . . We'll find another ship! . . . We'll get back! . . . Because we're free men, born to be on our own . . . brought up to fight on a team or alone . . . trained to live for our country, not to give up and die!

So, bear down, Mister . . . bear down . . .

For every drop of blood they spill . . . for every heart they break . . . for every tear that's shed . . . for every ship that's sunk . . . for every plane it costs . . . for every man of ours who's lost . . . they'll pay with ten of their own!

Bear down, Mister . . . bear down . . .

So the freedom we want . . .

So the futures we want . . .

So the country we want . . .

Will be there when we get back!

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When you're
training with "live
ammunition," the rule is

**Keep
your head
down!**

IT'S *lesson No. 1* in infiltration training—keep your head down! For those bullets streaking overhead in this night photograph above of Marines in training *aren't blanks!* They're the real thing! That's the way they're being trained nowadays...so that when these young men are finished with their training, they'll be fighting Marines through and through...from the pack on the back to the pack of Camel cigarettes in the pocket.

THIS IS THE
PACK FOR ME—
CAMELS—THEY'VE
GOT WHAT IT
TAKES!

—AND NO
MATTER WHERE I
GET 'EM, CAMELS
ALWAYS TASTE
**FRESH—FULL OF
FLAVOR**

"CAMELS ARE SO
EASY ON MY **THROAT**
—AND SO **FRESH**
AND FLAVORFUL"

● Her name is Jean Curran. Her war job is with the Sperry Gyroscope Co. Her cigarette—Camel. She says, "I smoke Camels because I want a cigarette that won't go dry or flat-tasting. Camels always taste so fresh, so cool, so good."



Camels



The "T-Zone"

where cigarettes are judged



The "T-ZONE"—Taste and Throat—is the proving ground for cigarettes. Only *your* taste and throat can decide which cigarette tastes best to you...and how it affects your throat. Based on the experience of millions of smokers, we believe Camels will suit your "T-ZONE" to a "T."

They've Got What it Takes!

Fighting front or home front, you'll hear the same: Camels—they've got what it takes! Extra-mild, full-flavored, and *fresh*. For Camels are packed to go round the world...to stay *fresh* anywhere.

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